

**Indiana's 5-Year Hazardous Air Pollutant Strategy:
A Report to the Environmental Quality
Service Council**

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Environmental Management

and

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EXECUTIVE SUMMARY

This report addresses the requirements of Senate Enrolled Act (SEA) 259, which was passed by the 2002 Indiana General Assembly. The law tasks the Indiana Department of Environmental Management (IDEM) and Indiana State Department of Health (ISDH) with developing a five-year hazardous air pollutant (HAP) strategy.

Based on the findings in this report, IDEM and ISDH have identified the following priorities for efforts to reduce the health risk from HAP in Indiana:

- 1. The departments should continue to implement the HAP program in the Clean Air Act, including adoption and implementation of the maximum achievable control standards for HAP sources and permitting review of HAP sources.**
- 2. The departments should continue to address identified state- or community-specific HAP risk issues not addressed by the Clean Air Act, or that should be addressed sooner, such as the pursuit of innovative voluntary mobile source emission reduction programs to address diesel emissions.**
- 3. The departments should continue to assess suspected state- or community-specific HAP risk issues, including conducting detailed local assessments. One tool discussed extensively to date is expanding the existing authority to collect HAP emission information as relevant to local/state assessments.**
- 4. The departments should continue to work on preventing pollution.**
- 5. The departments should maintain an on-going process with stakeholder involvement to continuously review and revise Indiana's HAP program as more information becomes available.**

One goal of the legislation was to ensure that new HAP emissions reporting, which had been proposed by IDEM in amendments to the state's emission reporting rule, would be tied to IDEM and ISDH strategic goals for reducing HAP risks and relevant data needs.

As part of this report, IDEM is advocating a revised approach on the HAP emission reporting rule. IDEM believes that the preliminarily adopted rule should be revised to provide the authority to collect needed information for specific local or statewide assessments based on available information. IDEM also believes that sufficient information now exists for certain HAPs to require additional reporting to complete needed assessments. Discussions should

continue with the Air Pollution Control Board and interested persons to determine the specific content of a HAP emission reporting rule.

Pursuant to SEA 259, this report contains the departments' evaluation of currently available data sources, with special attention to the quality and usefulness of existing data sources, and discussion of where the data gaps exist. Currently available data allow the agencies and other interested parties to draw some general conclusions about levels of risk from HAP posed to Indiana citizens, but also highlight areas where uncertainties exist. In the discussion on data needs in the report, the departments have identified a range of options. Next, we set forth a preferred approach to address gaps in each data source as required by SEA 259 that take a variety of factors into consideration. This discussion is contained in Section III of the report.

The report also summarizes what the departments feel can reasonably be concluded from existing data and modeling, with caveats where appropriate. The review of this information has shown that there are some areas in the state where risk of adverse health impacts from HAP may be higher than 1) elsewhere in the state, 2) elsewhere in the country or 3) levels generally felt to be acceptable.

Although the departments feel that both the input data and modeling need further refinement, the following findings are presented to give a general indication of potential risk. Key findings include the following:

- The statewide cumulative average cancer risk resulting from exposure to HAP is estimated by EPA modeling to be 60 in a million, or 9 percent higher than the national average. This represents the increased probability of Indiana residents contracting cancer resulting from exposure to HAP. US EPA considers cancer risk less than or equal to one in a million to be negligible.
- All Indiana residents are exposed to estimated cancer risk resulting from exposure to HAP greater than 23 in one million based on EPA modeling. Some areas of the state (e.g., Marion, Allen and Lake Counties) have significantly higher estimated risk. These three counties, which account for 27% of the state population, have a population-adjusted estimated cancer risk of 94 in a million – almost 60% greater than the statewide average.
- Point and area sources are the major contributors to cancer risk estimates in 99 of the top 100 census tracts with the highest risk estimates based on EPA modeling. The top 100 census tracts – with an estimated aggregated population of over 350,000 persons – all have an estimated risk greater than 113 in a million.

- Based on IDEM air monitoring and EPA modeling, key HAP driving cancer risk in Indiana are chromium, benzene, coke oven gas, polycyclic organic matter, nickel, quinoline and formaldehyde.
- Sources that emit HAP of concern include mobile sources, primary metals industries, fuel production and distribution operations, fabricated metals industries, plastics and rubber manufacturing, chemical (including pharmaceutical) production and electric generating utilities.

This review confirms the need to continue implementation of existing HAP programs and to research, monitor and evaluate conditions in Indiana that may warrant specific reduction programs. It also confirms that the ability to obtain more complete and accurate information about emissions and ambient concentrations of HAP are critical tools in addressing identified or suspected high risks. This discussion is contained in Section IV.

Finally, in Section V, the departments identify priorities to address significant risks posed by HAP over the next five years. While implementation of the strategy is expected to occur during the time period from July 1, 2002 through June 30, 2007, it is likely that the five-year HAP strategy will be revisited as issues emerge and additional information becomes available.

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SECTION I – PURPOSE

This report addresses the requirements of Senate Enrolled Act (SEA) 259, which was passed by the 2002 Indiana General Assembly. One goal of the legislation was to ensure that new hazardous air pollutant (HAP) emissions reporting, which had been proposed in amendments to the state's emission reporting rule, would be tied to the Indiana Department of Environmental Management (IDEM) and Indiana State Department of Health (ISDH) strategic goals for reducing HAP risks and relevant data needs. The law tasks the IDEM and ISDH with developing a five-year HAP strategy.

The five-year HAP strategy is to include the following elements:

- an inventory of HAP emissions in Indiana
- an assessment of the quality and usefulness of existing emissions, monitoring and health data
- a description of data gaps, alternatives to fill those gaps, and identification of the preferred approach among those alternatives
- identification of the top ten (10) priorities to address significant risks posed by HAP releases and the basis for each priority
- an inventory of sources, source categories and HAP that require additional study to determine human health impacts
- identification of additional HAP data needs, including the
 - intended uses of
 - processes to be used to collect; and
 - resources necessary to collect and assess the additional data

This strategy is to be provided to the Environmental Quality Services Council by November 1, 2002. A copy of the legislation is available at
<http://www.IN.gov/legislative/bills/2002/SE/SE0259.1.html>

Pursuant to SEA 259, the departments have evaluated currently available data sources, with special attention to the quality and usefulness of existing data sources, and where the data gaps exist. Currently available data allow the agencies and other interested parties to draw some conclusions about levels of risk from HAP posed to Indiana citizens, but also highlight areas where uncertainties exist.

This report catalogues existing sources of information on HAP levels in our air and emissions and evaluates the accuracy and completeness of these sources. It identifies gaps in currently available information and possible ways to fill those gaps. As a general matter, more data would fill more gaps. The report makes this point for most of the data sources initially without consideration of costs, data needs, and the potential HAP risks identified in this report. In the discussion on data needs, the departments have identified a range of options. Next, we set forth a preferred approach to address gaps in each data source as required by

SEA that take these other factors into consideration. This discussion is contained in Section III of this report.

The report also summarizes what the departments feel can reasonably be concluded from existing data, with caveats where appropriate. The review of available data on HAP in Indiana has shown that there are some areas in the state where risk of adverse health impacts from HAP may be higher than 1) elsewhere in the state, 2) elsewhere in the country or 3) levels generally felt to be acceptable. It confirms the need to continue implementation of existing HAP programs and to research, monitor and evaluate conditions in Indiana that may warrant specific reduction programs. This discussion is contained in Section IV.

Finally, in Section V, the departments identify priorities to address significant risks posed by HAP over the next five years. The priorities include continuing or initiating specific program activities and areas where the departments feel additional investigation is warranted. While implementation of the strategy is expected to occur during the time period from July 1, 2002 through June 30, 2007, it is likely that the five-year HAP strategy will be revisited as issues emerge and additional information becomes available.

SECTION II – INDIANA’S AIR TOXICS PROGRAM

With a few notable exceptions, the State of Indiana’s air toxics program is based on the federal program, established under Section 112 of the Clean Air Act. The federal program includes elements addressing routine (everyday) emissions from major sources of HAP, pollutants or industrial source categories of special concern, and accidental releases of acutely toxic chemicals. More information on specific requirements in the federal program is available at
<http://www.epa.gov/ttn/atw/>

The Clean Air Act, as amended in 1990, identified 188 pollutants as hazardous air pollutants (HAP) and established a two-phase program for reducing emissions and risk presented by HAP. The first phase requires US EPA to develop technology-based standards, known as maximum achievable control technology (MACT), to reduce emissions of HAP from major emitting sources. The MACT standards are developed by industry group (or source category) and based on the emission levels achieved by the best controlled (lowest emitting) sources within the industry. MACT was required to be applied to all major sources of HAP no later than November 15, 2003, based on a schedule established by US EPA in accordance with the Clean Air Act.

Since 1990, US EPA has issued MACT standards for over 90 major industrial source categories (as of September 1, 2002), including steel mills, chemical plants, oil refineries, as well as categories of smaller sources such as dry cleaners, commercial sterilizers and chromium electroplaters. Indiana adopts

the federal standards into state rule and accepts delegated authority, under a process established in Section 112, to implement and enforce the standards. An estimated 750 Indiana sources are subject to one or more MACT standards.

The Clean Air Act contains a provision that serves as a regulatory ‘backstop’ should US EPA fail to issue a final MACT standard for a source category by the identified schedule described above. This provision, contained in Section 112(j) and referred to as the ‘MACT Hammer,’ requires industrial sources to revise their operating permits within a specified time period following the missed regulatory deadline to include HAP emission limits equivalent to what US EPA would have established in the MACT standard.

As of November 1, 2002, US EPA has missed the regulatory deadline for several MACT standards. Affected sources have begun the process of filing applications with IDEM to amend their operating permits to include the appropriate HAP emission limits. However, given the time frame allowed for review, it is likely that US EPA will issue final MACT standards prior to the permit revisions being completed.

It is anticipated that by November 2006, all major HAP emitting sources will be regulated under the MACT program.

US EPA has also issued four standards under Section 129 of the Clean Air Act to control emissions, including certain toxic pollutants, from combustion sources. Source categories addressed by these standards include large municipal waste combustors, medical waste incinerators, commercial and industrial solid waste incinerators, and small municipal waste combustors. IDEM implements these standards as well.

The second phase requires US EPA to address risk presented by HAP. This phase includes two elements. One element is to assess residual (or remaining) risk from sources, or source categories, addressed under the MACT program. This assessment is required eight years after the MACT standard is issued. If necessary, US EPA may implement additional standards to address any significant remaining risk. A second element is to assess and address risk presented by HAP in urban areas. US EPA has identified the 34 HAP that pose the most significant threat in urban areas across the country and a strategy for addressing the risk posed by these pollutants. This strategy is known as the Urban Air Toxics Strategy.

US EPA is in the early stages of assessing residual risk and urban air toxics and is exploring ways for states to play a bigger role in this process. For example, US EPA recently released the National Air Toxics Assessment (NATA). NATA is a national-scale assessment of the HAP of most concern in urban areas. NATA is a tool that states can use to identify potential HAP risks at the state and local level for further study.

US EPA has also been using risk assessment to determine if pending and future MACT standards warrant technology controls (e.g., the Brick MACT and the HCL MACT).

The Clean Air Act also directs US EPA to conduct special studies to assess and address risks posed by specific chemicals or source categories, and the impact of HAP on the Great Lakes and other major water bodies. Chemicals under this directive include persistently bioaccumulative toxics, hydrogen sulfide and hydrofluoric acid. Persistently bioaccumulative toxics (a group of pollutants identified because they breakdown slowly in the environment and accumulate (build up) in each level of the food chain. Pollutants in this group include alkylated lead compounds, polycyclicorganic matter (POM), mercury, hexachlorobenzene, polychlorinatedbiphenyls(PCB), 2,3,7,8-tetrachlorodibenzofurans (TCDF) and 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Source categories under this directive include utilities, coke ovens, and publicly owned treatment works (POTW).

More information on these studies and their findings is available at
<http://www.epa.gov/ttn/atw/>

In addition to addressing everyday emissions of HAP, Section 112(r) of the Clean Air Act requires certain facilities to implement risk management programs designed to prevent the accidental release of acutely toxic chemicals. These requirements became effective in July 1999.

Because HAP emissions from mobile sources are a national concern, US EPA leads efforts in reducing these emissions. Since 1990, cleaner fuels along with inspection and maintenance programs have been required in ozone nonattainment areas. IDEM oversees these programs in Indiana. US EPA has also issued tighter emissions standards for both gasoline and diesel-powered engines that will take effect over the next several years. While the federal programs have focused on ozone and particulate pollution, they have also significantly reduced HAP emissions from mobile sources, especially with respect to diesel engines. US EPA released a health assessment for diesel engine exhaust in May 2002. This assessment indicated that diesel engine exhaust is a significant contributor to cancer risk in urban areas. More information on this assessment is available at
<http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=29060>

In addition to implementing the Clean Air Act and federal standards in Indiana, IDEM has established emission standards or programs based on state-specific environmental and public health concerns posed by HAP. Examples include:

- more stringent emission and work practice standards for secondary lead smelters;
- emission and work practice standards for the reinforced composites

- manufacturing industry;
- community-based air toxics monitoring in four urban areas located across the state (**discussed later in this report**);
- local community emission and air quality assessments (**discussed later in this report**); and
- a joint study with the US Geological Survey to assess atmospherically deposited mercury across the state (**discussed later in this report**) .

In the 1999-2001 Environmental Performance Partnership Agreement (EnPPA) with US EPA, IDEM identified reducing toxic releases to the environment as a priority. This work continues through the 2001-03 EnPPA. In 1999, IDEM began reviewing available data to establish priorities in this area. One priority identified by this earlier work was the need to improve the quality of HAP emissions inventories, prompting proposed amendments to the state air emissions reporting rule to include HAP reporting.

IDEF's Office of Pollution Prevention and Technical Assistance works with Indiana businesses to reduce toxic emissions through voluntary programs focused on source reduction, reuse and recycling, voluntary compliance and pollution prevention. OPPTA encourages participation through grants, public recognition rewards, broad-based educational programs and technical assistance. Two noteworthy programs include the Governor's Toxic Reduction Challenge and the 5-Star Environmental Recognition Programs both of which have allowed businesses to work in partnership with the state and their local communities to reduce toxic emissions. More information on these programs is available at <http://www.IN.gov/idem/oppta/>

SECTION III – HAP IN INDIANA: WHAT WE KNOW

There are five principal types of information available to assess HAP in Indiana:

- emissions
- monitoring
- modeling
- health
- other

No single source of information can alone be used to assess and reduce risk, but rather several sources of information must be used in unison. Emissions data, monitoring and modeling provide important pieces of the puzzle. It is important that the information provided by each source be as accurate and complete as possible to allow for a credible estimate of risk and a practical assessment of what needs to be done to reduce risk.

Each is discussed below, along with how IDEM and ISDH evaluated and used them in this report.

A. Emissions Data

Three sources of emissions information were assessed.

- US EPA's Toxics Release Inventory (TRI)
- IDEM's RAPIDS Inventory
- Other Inventories

➤ US EPA's Toxics Release Inventory (TRI)

Description –

This inventory was established under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and expanded by the Pollution Prevention Act of 1990. EPCRA requires annual reporting of over 600 chemicals, including all HAP, from stationary sources in the manufacturing and other select industrial sectors. TRI data are available back to 1986, although the reportable chemical list has grown significantly since the program's inception. Applicability was expanded in 1998 to include electric utility emissions. In addition to providing the public with information, TRI data are often used to measure emission trends and the effectiveness of environmental programs.

US EPA provides an easily searchable database interface called TRI Explorer. This tool and a more complete description of the data that are collected may be accessed at <http://www.epa.gov/triexplorer/introduction.htm>

The TRI Explorer provides access to the TRI data to help communities identify facilities and chemical release patterns that warrant further study and analysis. Combined with hazard and exposure information, the TRI Explorer can be a valuable tool for risk identification.

The most recent data available are for the calendar year 2000. Facilities reporting to TRI were required to submit 2000 data to US EPA by July 2001. It generally takes US EPA six to nine months to compile the data before it is released. US EPA released 2000 data in April 2002; 2001 data are expected to be available April 2003. **IDEV reviews the data for reporting errors.**

TRI data reflect releases of chemicals, not exposures of the public to those chemicals. TRI data alone are not sufficient to determine exposure or to calculate potential adverse effects on human health and the environment. TRI data, in conjunction with other information, can be used as a starting point in evaluating exposures that may result from releases that may involve toxic chemicals.

How the data were evaluated –

An analysis of total reported HAP releases to the air was conducted using 2000 TRI data. Following are text and tables summarizing what the 2000 TRI data tell us about emission of HAP in Indiana. We have reported these results by HAP, by county and by industrial sector.

Findings –

HAP

Indiana consistently ranks among the top ten states for air releases reported to TRI. For the 2000 reporting year, Indiana ranked 7th nationally with over 89.7 million pounds reported air releases. However, the state ranked #2 for carcinogen releases and #3 for metals releases. **Note – Quantity of releases does not equate to risk.**

2000 TRI AIR DATA				
Listing	# of Chemicals Reported	Quantity Released (in pounds)	National Rank	
Total TRI Air Releases (includes more than HAP)	199	89,664,614	7	
HAP	102	68,189,338	7	
OSHA Carcinogens	54	12,189,622	2	
Metals	35	2,526,615	3	
PBTs	8	17,606	28	

Of the 102 HAP reported to TRI, 13 were released in a quantity greater than 1 million pounds. The following table lists the top ten.

2000 TRI AIR DATA - Top Ten HAP Reported (Indiana)			
Chemical	Quantity Released (in pounds)	Chemical	Quantity Released (in pounds)
Hydrochloric acid	27,588,464	Hydrogen fluoride	3,959,114
Toluene	5,846,520	Hexane	3,124,516
Styrene	5,585,531	Methyl ethyl ketone	1,789,994
Xylene (mixed)	5,087,084	Glycol ethers	1,704,815
Dichloromethane	3,959,990	Methanol	1,644,155

COUNTIES

Twenty counties had aggregate HAP releases reported in a quantity greater than 1 million pounds. The following table lists the top ten.

2000 TRI AIR DATA – Top Ten Counties Aggregate HAP Releases to the Air (Indiana)			
Chemical	Quantity Released (in pounds)	Chemical	Quantity Released (in pounds)
Elkhart	5,952,698	Jefferson	3,044,530
Gibson	5,710,874	Floyd	2,960,578
Dearborn	4,653,179	Tippecanoe	2,465,116
Warrick	3,727,289	Spencer	2,372,224
Vermillion	3,579,522	Allen	2,197,425

SECTORS

Five industrial sectors – electric utilities, plastics, primary metals, transportation equipment and chemicals – accounted for almost 80% of the reported HAP releases.

2000 TRI AIR DATA – Top Ten Industrial Sectors (based on two-digit SIC Code)* Aggregate HAP Releases to the Air (Indiana)			
Sector	Quantity Released (in pounds)	Sector	Quantity Released (in pounds)
Electric Utilities	28,793,954	Fabricated Metals	3,199,095
Plastics	8,889,627	Food	3,094,858
Transportation Equipment	6,009,674	Multiple Codes	2,334,484
Primary Metals	4,978,237	Paper	1,659,795
Chemicals	3,753,637	Miscellaneous	1,035,899

* A more detailed description of businesses included in each industrial sector is available at the Occupational Safety and Health Administration website.
<http://155.103.6.10/cgi-bin/sic/sicserv>

**2000 TRI AIR DATA – Top Five Industrial Sectors
(based on two-digit SIC Code)*
Aggregate OSHA Carcinogen** Releases to the Air (Indiana)**

Sector	Quantity Released (in pounds)
Plastics	5,933,477
Transportation Equipment	2,355,013
Reported more than one SIC Code	1,381,302
Chemicals	1,022,366
Fabricated Metals	542,390

* A more detailed description of businesses included in each industrial sector is available at the Occupational Safety and Health Administration website.
<http://155.103.6.10/cgi-bin/sic/sicser5>

** Based on OSHA definition of carcinogen.

**2000 TRI AIR DATA – Top Five Industrial Sectors
(based on two-digit SIC Code)*
Aggregate Metals Releases to the Air (Indiana)**

Sector	Quantity Released (in pounds)
Electric Utilities	1,454,216
Primary Metals	745,203
Transportation Equipment	101,167
Fabricated Metals	90,145
No Reported Code	61,385

* A more detailed description of businesses included in each industrial sector is available at the Occupational Safety and Health Administration website.
<http://155.103.6.10/cgi-bin/sic/sicser5>

The following are strengths and weaknesses of US EPA's TRI data.

Strengths –

- Provides estimated plant-wide HAP emissions.
- Addresses most large emitters.
- Can track emission trends over time.
- Meets most public information needs.

Weaknesses –

- Does not include mobile or area source emissions.
- Not all potential sources of concern are required to report to TRI.
- Does not provide information on processes that emit chemicals.
- Several chemicals of concern (e.g., metals) can be reported in ranges, significantly skewing assessment results.
- Chemicals of concern may not be required to be reported due to reporting thresholds.
- IDEM currently does not have adequate authority to request additional information or underlying documentation. All manufacturers and electric utilities must evaluate chemical use to determine reporting requirements and to maintain records. Access to this information would help improve the usefulness of the data.
- Seasonal or periodic spikes cannot be identified because the data are annualized.
- Sources are only required to use best estimates. No stack testing or other monitoring are required.
- Reflects releases, not exposure; must be used with other information or tools to characterize risks.

Ways to Improve the Data –

- establish the authority to require sources to report HAP emissions information or the authority to request additional HAP emissions information, as needed.
- improve the quality of emission estimates by having sources either submit emissions information, or review and verify emission estimates made by IDEM.
- establish state authority to require sources to provide additional information on TRI releases or underlying documentation.
- work with industry to develop better emission factors, either through process-specific testing or improved models and engineering calculations.

> IDEM's RAPIDS Inventory

Description –

Because TRI reporting focuses on stationary sources in the manufacturing and other select industrial sectors, it provides only part of the picture. Since 1994, Indiana has participated in an inventory development project with eight other states and Ontario, Canada. This project, known as the Regional Air Pollutant Information Development System (RAPIDS), is part of the Great Waters program established under Section 112(m) of the Clean Air. The most recent inventory year for this project is 1999.

Because they provide the most complete HAP emissions information, the 1999 RAPIDS point and area inventories and 1998 mobile inventory serve as the basis

for this report. The 1999 point and area source inventories consist of IDEM estimated and source reported HAP information for all 188 HAP (Note: these estimates include TRI data). The 1998 mobile HAP inventory includes only 82 of the HAP, however it contains the most complete estimates for mobile source HAP.

More information on the RAPIDS project is available at
<http://www.glc.org/air/rapids/rapids.html>

How the data were evaluated –

BY HAP

RAPIDS data were reviewed by total mass emissions. This includes all point, area and mobile data and estimates summed for a grand total by HAP statewide. This analysis did not consider toxic characteristics of the HAP, just mass emissions.

COUNTY ANALYSIS AND SOURCE SECTOR TYPES

RAPIDS data were reviewed by total mass emissions for identified carcinogenic and persistent biocumulative toxics (PBT). Carcinogenicity and PBT listings were obtained from TRI reporting documentation. This includes all point, area and mobile estimates summed for a grand total by HAP toxicity, not individual HAP. All listed counties have estimated total mass HAP emissions greater than 1 million pounds. Source sector types are the top ten emission sectors by mass of persistently bioaccumulative toxins and carcinogens as determined through this method.

Findings –

HAP

Statewide total HAP emissions were estimated to be 273.4 million pounds for 1999 from all contributing sectors – point and area (smaller) stationary, and 1998 mobile (onroad and non-road) sources. Point source HAP emissions alone were estimated at 109.5 million pounds or almost 60% greater than the levels reported to TRI. The difference between TRI and RAPIDS estimates result from several factors, including IDEM estimating HAP emissions not reported by the sources, differences in the values reported by the sources themselves and a lack of documentation on how sources estimated releases reported to TRI.

Statewide source contributors are approximately 40% point sources, 25% onroad mobile sources, 25% area sources, and 10% non-road mobile sources. The contribution by source type varies depending on the specific location (e.g., urban vs. rural).

RAPIDS DATA
1999 Point + Area/1998 Mobile

	Point Sources	Area Sources	Onroad Mobile sources	Nonroad Mobile Sources	Total Emissions
Total HAP	109,467,132	67,465,666	69,532,429	26,964,156	273,429,383
	40%	25%	25%	10%	

Of the 168 pollutants included in the inventory, 26 were estimated to be emitted in a quantity greater than 1 million pounds.

RAPIDS DATA
1999 Point + Area/1998 Mobile
Top Ten HAP (Indiana)

Chemical	Point Sources	Area Sources	Onroad Mobile sources	Nonroad Mobile Sources	Total Emissions
Toluene	6,854,792	17,112,252	25,182,832	7,279,051	56,428,927
Hydrochloric Acid	54,378,891	210,336			54,589,227
Xylenes (mixed)*	5,775,732	14,568,201	5,708,833	2,527,472	41,162,630
Benzene	433,441	1,761,302	5,708,833	2,527,472	10,431,049
Hexane	4,962,299	4,132,408		1,070,630	10,165,337
Formaldehyde	352,417	315,182	5,065,515	3,955,398	9,688,512
Methanol	3,274,390	3,849,269			7,123,659
Styrene	6,012,917	2308	842,319	108,753	6,966,297
Ethylbenzene	691,820.41	913,178	3,651,762	1,669,744	6,926,505
Hydrogen fluoride	6,845,451	8			6,845,460

A more detailed breakdown of all HAP in the RAPIDS inventory and the source contribution, by percentage, for the 33 HAP of concern identified in this report, are available in Appendix A.

Emissions data focus on estimates of environmental releases, which does not necessarily equate to risk. Certain HAP used or released in high volumes – for example, hydrochloric acid or toluene – that show up high on emission reporting lists, such as TRI, may not present the greatest public health concerns.

On the other hand HAP, such as chromium compounds or POM, that are emitted in lesser quantities may present significant public health concern.

One approach for identifying and ranking potential HAP of concern is to calculate toxicity-weighted emissions. This approach is commonly used by US EPA and other states. While not a true indicator of risk potential, this calculation attempts to factor toxicity into the equation. Toxicity weighting factors developed by US

EPA's Office of Pollution Prevention and Toxics were used in this assessment. More information on these factors and how they are used may be obtained at http://www.epa.gov/opptintr/rsei/docs/tech_app_a.pdf

Toxicity-weighting factors were applied to the 33 HAP of concern identified in this report. A cancer and/or noncancer toxicity-weighting factor is available for 31 of the chemicals or chemical groups. The two exceptions are chromium compounds (other than Cr⁺⁶) and hydrogen fluoride for which no toxicity weighting factors were available. Another concern is that, because sources reporting to TRI do not specify whether chromium emissions are in the hexavalent (Cr⁺⁶) form, assumptions have to be made concerning chromium emissions. It is generally assumed that 2/3 of chromium emissions are in the more toxic hexavalent form. The other 1/3 are assumed to be in the less toxic trivalent form. **This is considered a conservative assumption.**

Based on emissions weighted for carcinogenic health effects, the following HAP ranked the highest:

- POM
- Coke Oven Emissions
- Metals
- Formaldehyde
- Benzene
- Chromium (hexavalent)

A complete table is available in Appendix B.

Based on emissions weighted for noncarcinogenic health effects, the following HAP ranked the highest:

- Acrolein
- Lead Compounds
- Manganese Compounds
- Hydrochloric Acid
- Naphthalene
- Cobalt

A complete table is available in Appendix B.

COUNTIES

Fifty-nine (59) counties had estimated HAP emissions (from all sources – point, area and mobile) greater than one million pounds in the 1999 RAPIDS inventory.

RAPIDS DATA 1999 Point + Area/1998 Mobile Top Ten Counties Aggregate HAP Releases to the Air (Indiana)			
County	Quantity Released (in pounds)	County	Quantity Released (in pounds)
Marion	26,992,269	Gibson	8,496,494
Lake	13,626,701	Warrick	7,089,841
Elkhart	13,259,526	Tippecanoe	7,068,850
Spencer	10,683,732	St. Joseph	7,034,737
Allen	10,658,006	Pike	6,766,313

A complete table is available in Appendix A.

SECTORS

The top industrial sectors, based on HAP releases, are listed in the table below.

RAPIDS DATA – Top Ten Industrial Sectors 1999 Point + Area (based on four-digit SIC Code) HAP Releases to the Air (Indiana)		
SIC Code	Sector	Quantity Released (in pounds)
4911	Electric Utilities	58,323,784
2075	Soy Bean Oil Mills (Food)	4,117,465
3089	Plastic Products	3,754,007
3086	Plastics Foam Products	2,731,731
3334	Primary Aluminum Production	2,426,593
3312	Steel Mills, Coke Ovens	2,262,836
3711	Motor Vehicle Body Production	2,003,695
2821	Plastics Materials	1,801,468
2671	Packaging Paper and Plastics	1,293,210
3069	Fabricated Rubber Products	1,288,341

A complete table is available in Appendix A.

The data suggest that with the exception of a few pollutants, point and area sources are significant contributors of emissions.

The following are strengths and weaknesses of IDEM's RAPIDS data.

Strengths –

- Provides the most complete quality assured HAP emissions inventory.

Weaknesses –

- Limitations inherent in underlying data sources or estimation techniques.
- Adjustments to point source estimates made by IDEM have not been reviewed or certified by individual sources for accuracy.
- Area and mobile estimates are based on surrogate data and emissions estimation models that may be overestimating or underestimating emissions.
- IDEM currently does not have adequate authority to require sources to submit additional information, as necessary to evaluate identified or suspected HAP concerns.
- Seasonal or periodic spikes cannot be identified because the data are annualized.
- Reflects releases, not exposure; must be used with other information or tools to characterize risks.

Ways to Improve the Data –

- Establish the authority to require sources to report HAP emissions information or the authority to request additional HAP emissions information, as needed.
- Improve the quality of emission estimates by having sources either submit emissions information, or review and verify emission estimates made by IDEM.
- Work with industry to develop better emission factors, either through process-specific testing or improved models and engineering calculations.

Other Emissions Information

Description –

The National Emissions Inventory (NEI) is another inventory of note, primarily because it was used in NATA. US EPA assembles this inventory using information reported by the states, TRI, federal data collection, and other information. A more detailed discussion of NATA is provided later in this report. The NEI was not evaluated independently in the report because it is used in NATA. Many states, including Indiana, submitted substantial corrections to US EPA prior to its use in NATA. Some corrections were made and others were not. IDEM believes RAPIDS to be a more accurate inventory.

One source of emissions information not assessed as part of this report is stack test data. Stack tests are usually performed to verify emissions rates (e.g., pounds per hour of a specified pollutant), and therefore, must be combined with other information to calculate mass emissions over a specified time period (e.g., per year). In addition, limited speciated HAP stack emission data are available. Stack test data are factored into the analysis indirectly, as these data are often included in emissions estimates reported to TRI or the state.

B. Air Quality Monitoring Data

Three sources of ambient air monitoring are available.

- IDEM ToxWatch Data
- US Geological Survey (USGS) Mercury Deposition Data
- IDEM Metals Data

➤ IDEM ToxWatch Data

Description –

ToxWatch was initiated as a two-year study to measure the level of air toxics in four urban areas across the state. The goals of the study were to:

- determine ambient levels of selected toxic air pollutants,
- determine whether levels of any of the monitored pollutants were of sufficient concern to require further assessment or action, and
- assess the accuracy of modeling projections.

The four areas included in the study were Northwest Indiana (Lake and Porter Counties), North Central Indiana (Elkhart County), Central Indiana (Marion County) and Southwest Indiana (Posey and Vanderburgh Counties). While the two-year study was completed in 2001, monitoring continues in each of the study areas.

With a few exceptions, air samples are collected for a 24-hour period every six days by a canister sampler located at each monitoring station. The sample canister is sent to the IDEM Air Toxics Laboratory in Indianapolis for analysis. Results are posted on IDEM's web site and updated frequently.

<http://www.in.gov/idem/air/toxwatch/data/index.html>

Findings of the study are summarized below. A complete report, including findings and limitations, is available on IDEM's web site.

<http://www.in.gov/idem/air/toxwatch/reports/reports.html>

How the data were evaluated –

An advisory group of scientists and technical experts from academia, environmental groups, and the business community was assembled to evaluate the data with IDEM and participate in the longer-term policy discussions concerning the results. US EPA provided technical review of the draft report.

BY HAP

The monitoring data were compared to US EPA's Cumulative Exposure Project (CEP) benchmarks for both cancer and noncancer health effects. The CEP benchmarks were used because they represent levels below which health effects are not expected to occur. Concentrations posing a one-in-a-million cancer risk were used as benchmark concentrations for cancer effects. For noncancer health effects, concentrations represent levels below which long-term exposure is not expected to result in any adverse health effects. Additional information regarding the CEP benchmarks can be found at <http://www.state.in.us/idem/oam/toxwatch/health/index.html>.

HAP of concern were identified as those where the mean concentration at the two-year monitoring stations exceeded the US EPA benchmark. Additionally, only those HAP in which IDEM had high confidence in the reliability of the measurements were included. For example, while the mean concentration of carbon tetrachloride was above the US EPA benchmark, it was not included because a significant number of samples were below the laboratory detection limit. The measured values were above zero but not within a 95% confidence level.

BY COUNTY

All two-year monitoring stations measured at least one HAP of concern, typically benzene; therefore all areas where a monitor is located were determined to be an area of concern.

BY SOURCE SECTOR

Finally, the source sectors that emit each of the identified HAP of concern were identified.

Findings –

CHEMICALS

Review of ToxWatch data indicated seven HAP of concern:

- benzene
- carbon tetrachloride
- chloromethane
- styrene
- trichloroethene
- vinyl chloride
- vinylidene chloride

Three HAP – benzene, carbon tetrachloride, and chloromethane – were found at all monitoring stations at mean concentrations exceeding US EPA's CEP cancer benchmark.

Four HAP – p-dichlorobenzene, chloroform, trichloroethene and styrene. exceeded US EPA's CEP cancer benchmark at one or more monitoring stations. P-dichlorobenzene and chloroform were eliminated because they were measured at low levels and in only small percentage of the samples, resulting in concerns about the quality of the data.

Two HAP – vinyl chloride and vinylidene chloride – were identified as chemicals of concern because of a high levels monitored at Mount Vernon Middle School in Posey County in February 2000.

No HAP were monitored at levels exceeding US EPA's CEP noncancer benchmarks.

Indiana's monitoring findings are consistent with the findings of NATA. That analysis of 1996 emissions data indicated that, due to elevated background concentrations, seven HAP exceeded the CEP benchmarks all across the country. These HAP include four that had high monitored concentrations in Indiana – benzene, carbon tetrachloride, chloroform and chloromethane.

While at least one HAP exceeded the CEP cancer benchmark at all of the Indiana monitoring locations, there are clearly some localized influences. For example, the highest styrene levels were measured in Elkhart where there are a significant number of fiberglass and plastics manufacturers that use styrene.

COUNTIES

Areas of concern include all areas where monitoring stations are located – Lake, Porter, Elkhart, Marion, Posey and Vanderburgh Counties.

SOURCE SECTORS

Source sectors of concern include mobile sources, plastics manufacturing (including fiberglass), and gasoline distribution.

The following are strengths and weaknesses of IDEM's ToxWatch data.

Strengths –

- Provide important evidence of exposure potential.
- Continued operation allows analysis of toxic emissions trends.
- Can be used to verify modeled pollutant concentrations and assess accuracy of models for use in areas where monitoring data are not available.

Weaknesses –

- Are limited by location and by short assessment periods (ranging from six-months to two years).
- Monitoring is resource intensive.
- Samples are intermittent, 24-hour composite samples collected every six

- days rather than continuous samples, limiting comparison to modeled average annual concentrations or continuous exposure health benchmarks. Additionally, because the samples are collected over a 24-hour period, spikes may be missed.
- Are not available for all pollutants of potential concern (either because of equipment or detection limits).
 - Are not source-oriented, which would be helpful in assessing impacts from specific pollutants or source sectors.
 - Reflect exposure potential only; must be used with other information or tools to characterize risks.
 - Reflect air quality only in areas where monitors are located; higher exposure potential may exist in areas near specific sources, even within the same communities currently monitored.

Ways to Improve the Data –

The way to improve monitoring data is to collect more of it. Air monitoring data provides important evidence of exposure potential. Other analysis tools, such as emissions estimates and modeling projections, provide empirical estimates of exposure potential.

There are several ways to address gaps in air monitoring data:

- use of different monitoring methodologies, especially for short-term screening of air quality to identify sites where more detailed monitored may be warranted.
- adding monitoring locations, to allow for better spatial and temporal assessment;
- expanding monitoring platforms, to allow for assessment of more HAP of concern;
- adding source-oriented monitors, to confirm findings of other tools;
- use of continuous or real-time monitors to identify spikes.

➤ USGS Mercury Deposition Data

Description –

Mercury in Indiana's environment is a public health and environmental concern. Mercury, especially in its organic form – methyl-mercury – can affect the central nervous system of adults and children. The primary route of exposure to methyl-mercury is dietary, and unborn children are as much as 10 times more susceptible than adults to methyl-mercury's detrimental effects.¹

Fish consumption advisories are in place for most major waterways and bodies of water in Indiana. Assessments by US EPA and the US Geological Survey

¹ US Geological Survey, Indiana, web site <http://in.water.usgs.gov/newreports/mercury>

indicate that air deposition is the primary mechanism by which mercury is introduced into these waters.²

IDEM is working with the US Geological Survey on a multi-year project to monitor and assess atmospheric deposition of mercury in Indiana. This study is scheduled for completion in fall 2004.

Four monitoring stations have been established in the state –

- Indiana Dunes National Lakeshore (Porter County)
- Huntington Reservoir (Huntington County)
- Bloomington Airport (Monroe County)
- Clifty Falls State Park (Jefferson County)

A more complete description of the monitoring study and each monitoring station, and access to available data is available at <http://in.water.usgs.gov>

These monitoring stations participate in the national Mercury Deposition Network (MDN) coordinated through the National Atmospheric Deposition Program (NADP) and the data are shared nationally.

Goals for this study include –

- Assessing distribution of mercury in precipitation across the state.
- Assessing seasonal or annual trends in concentrations and deposition rates of mercury in precipitation.
- Establishing baseline mercury concentrations and deposition rates for precipitation prior to future regulatory controls.
- Comparing mercury concentrations and deposition rates with other states.

Summary data are available for the one-year period from fall 2000 through fall 2001. See the US Geological Survey web site for the complete report
<http://in.water.usgs.gov/newreports/mercury/DataSummaryJuly2002.shtml>

How the data were evaluated –

Compared preliminary data within the state and with other states.

Findings –

Preliminary data suggest that:

- distribution of mercury in precipitation across the state is consistent;
- mercury in precipitation in Indiana is consistent with the levels found in other nearby states;
- mercury methylation occurs principally in the aquatic system as opposed to being directly deposited.

² US Geological Survey, Indiana, web site <http://in.water.usgs.gov/newreports/mercury>

These data reflect deposition of mercury in precipitation, not exposures of the public to mercury or methylmercury. These data alone are not sufficient to determine exposure to or to calculate potential adverse health effects on human health and the environment. These data, in conjunction with other data – such as fish tissue samples, health advisories issued by the state Department of Health and emissions data – do support reducing mercury emissions from Indiana sources.

These are only preliminary data. A more complete assessment of the first year's worth of data is expected in late 2002 with a complete study report expected in late 2004.

Based on 2000 TRI data, 7420 pounds of mercury were reported released to the air. Electric utilities accounted for 77%, stone/clay/glass production 10% and primary metals production 10%. The remaining 3% was contributed by miscellaneous industrial sectors.

US EPA has issued a final report on mercury, including an assessment of the magnitude of U.S. mercury emissions by source, the health and environmental implications of those emissions, and the availability and cost of control technologies. More information on this report is available at <http://www.epa.gov/ttn/atw/112nmerc/mercury.html>. US EPA has also made a regulatory determination that mercury emissions from electric utilities should be controlled. More information on this determination and the timeline for regulating mercury emissions from electric utilities may be found at <http://www.epa.gov/ttn/atw/combust/utiltox/utoxpg.html>.

Recent legislation, known as the Clear Skies Act, has been introduced to regulate multiple pollutants – sulfur dioxide, nitrogen oxides and mercury – **emitted by electric utilities. If Clear Skies or other multi-pollutant legislation is passed**, mercury emissions from utilities would be affected.

The following are strengths and weaknesses of the US Geological Survey's mercury deposition data.

Strengths –

- Provide mercury deposition data for Indiana.

Weaknesses –

- Currently only one year's worth of data is available, limiting assessment at this point in time.

Ways to Improve the Data –

- Add more monitoring stations to better assess source-specific impacts.

> IDEM Metals Monitoring Data

Description –

Ambient metals data are available from the early to mid-1990s for six monitoring sites in Indiana. With the exception of one monitoring site (Hammond CAAP), IDEM collected the data in response to a source-specific concern or complaint.

Data were assessed from the following monitoring sites:

Hammond CAAP Trailer [general monitoring station]

Lake County	1996	arsenic, chromium, cobalt, nickel, lead, manganese
-------------	------	--

Sprague Marina

Porter County	1995	arsenic, chromium, cobalt, nickel, lead, manganese
---------------	------	--

Cummins Engine Test Center

Bartholomew County	1992	arsenic, chromium, cobalt, nickel, lead, manganese
--------------------	------	--

Allen County Motors

Allen County	1996	arsenic, chromium, cobalt, nickel, lead, manganese
--------------	------	--

Allen County Motors Upwind

Allen County	1996	arsenic, chromium, cobalt, nickel, lead, manganese
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Watkins Motor Lines

Allen County	1996	arsenic, chromium, cobalt, nickel, lead, manganese
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Samples were collected onto a quartz filter using a total suspended particulate (TSP) hi-volume sampler. The filters were sent to the IDEM Air Toxics Laboratory where they were analyzed for TSP mass and then assayed for metals. The samples were assayed for several metals; however, arsenic, chromium, cobalt, nickel and lead were evaluated in this assessment.

How the Data Were Evaluated –

1996 data were selected because this is the same analysis year used for NATA. In the case of Sprague Marina and Cummins Engine Test Center, 1995 and 1992 data were used, respectively, because those are the most recent years available.

First, the data were compared to US EPA's CEP cancer and noncancer benchmarks. Second, the data were compared to NATA to determine how well it

predicted ambient HAP concentrations. Finally, the data were compared to data available from other monitoring sites, both in Indiana and in Illinois and Michigan.

Limited inferences should be made with respect to counties of concern because the data are limited and somewhat dated – the latest available data for all metals except lead are from 1996.

A complete table summarizing IDEM metals monitoring data is available in Appendix C.

Findings –

A CEP cancer benchmark is available for four of the metals assessed – arsenic, chromium, nickel and lead. The ambient measurements reflected 1996 levels significantly greater than the benchmarks for three metals – arsenic, chromium and nickel. In some cases, such as with chromium, ambient levels were significantly higher than the benchmark. Ambient lead levels were significantly lower than the benchmark.

A CEP noncancer benchmark is available for all six metals. Levels at all sites were below the noncancer benchmarks for chromium, cobalt, nickel and lead. In the case of lead, the noncancer benchmark is the National Ambient Air Quality Standard that addresses lead as a criteria pollutant. Levels at several sites equaled or exceeded the noncancer benchmark for arsenic – Sprague Marina, Cummins Engine Test Center, Allen County Motors and Allen County Motors (Upwind). Levels of manganese at Hammond CAAP and Sprague Marina equaled or exceeded the noncancer benchmark.

Monitoring data are available for 1996 – the same analysis year used for NATA. This allows for a comparison of the modeling projections to real ambient monitoring data. This comparison reflected that NATA significantly underpredicted arsenic and chromium compounds (in some cases by several orders of magnitude) while data for the other metals were inconclusive.

In general, there was negligible difference in the metals levels among the monitoring sites in Indiana, with the exception of the site located downwind of Allen County Motors. Chromium and nickel levels, both high values and the annual mean, were significantly higher than at the other monitoring sites.

Finally, data were compared to measurements made in other Midwest states – Cook County, Illinois and Midland, County, Michigan. Measurements at the Indiana sites were higher than at the sites located in the other states.

The following are strengths and weaknesses of IDEM's metals monitoring data.

Strengths –

- Provide important evidence of exposure potential.
- Can be used to verify modeled pollutant concentrations and assess accuracy of models for use in areas where monitoring data are not available.
- Monitoring data available for 1996 – the same analysis year used for NATA; able to match projections with real data.

Weaknesses –

- Limited data.
- Limited spatially and temporally.
- Source-oriented data; not reflective of exposure potential for majority of Indiana residents.
- Data are dated; do not reflect changes in operations or plant closure that have occurred since 1996.
- Reflect exposure potential only; must be used with other information or tools to characterize risks.

Ways to Improve the Data –

Collection of additional metals data, especially in urban areas and downwind of significant emitting sources.

C. Modeling Data

Two sources of modeling information were assessed.

- US EPA's National-Scale Air Toxics Assessment (NATA)
- US EPA's Risk Indicator Screening Model

> US EPA's National-Scale Air Toxics Assessment (NATA)

Description –

In June 2002, US EPA released results of its national-scale assessment that produced health risk estimates for 32 HAP. NATA was based on 1996 emissions data and presents exposure and risk estimates for each HAP. It focuses solely on inhalation risks, although with some of the assessed HAP (e.g., mercury) other routes of exposure may present greater risk. HAP assessed include heavy metals (e.g., mercury and lead), volatile organic chemicals (e.g., benzene and solvents), and combustion byproducts.

Information on NATA and its findings may be found at
<http://www.epa.gov/ttn/atw/nata>

Although exposure to diesel exhaust is widespread and probably an important contributor to cancer risk in urban areas, US EPA did not address potential risk from exposure because existing data do not support a numerical estimate of

cancer potency for this class of pollutants. However, US EPA has concluded that diesel exhaust is a likely human carcinogen and ranks with the other HAP that the national-scale assessment suggests pose the greatest relative risk. <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=29060>. Given the suspected risk from exposure to diesel exhaust, a more specific assessment of diesel emissions, sources and opportunities to reduce emissions in Indiana is warranted.

US EPA also recently concluded a separate study of dioxin, another HAP of concern in urban areas. One of the preliminary findings of the study is that a significant portion of dioxin emissions are generated by backyard burning of household wastes. <http://cfpub.epa.gov/ncea/cfm/dei.cfm?ActType=default>

NATA is a national-scale assessment and is most meaningful when viewed at the national or state level. Caution should be exercised when drawing inferences concerning smaller scale areas (e.g., county-level). The smaller the scale, the more likely assessment errors (e.g., inventory inaccuracies) will affect the results.

While US EPA built-in a margin of safety on the exposure (how much people inhale) and dose-response (at what level health effects would be expected) estimates, the dispersion model tended to underestimate the ambient concentrations of the HAP assessed. However, because of how the overall assessment was performed, US EPA believes that most individuals are likely to have actual risks that are either equal to or less than the risks estimated by NATA, although some individuals may have actual risks that are greater.

For carcinogens, risk is often described as “xx-in-a-million.” This is the estimated probability of developing cancer, over a lifetime, as a result of exposure to a specific level of a chemical. A lifetime is considered to be 70 years of exposure to the chemical. This probability is in addition to the normal “expected” rate of developing cancer due to other factors (e.g., behavioral, genetic, and other factors). Expression of risk is complex. US EPA describes any risk that is less than one-in-a-million as a “de minimis” risk. **It describes** any risk greater than one-in-ten thousand as “unacceptable” risk. Risk levels between these two orders of magnitude are candidates for further evaluation. Therefore, it is important to recognize where risk is expressed as greater than one-in-a-million, it warrants further assessment but is not necessarily unacceptable risk.

To provide an idea of the size of risks from environmental hazards as risk analysts will describe them to you, the continuum below presents risk statistics for some familiar events.

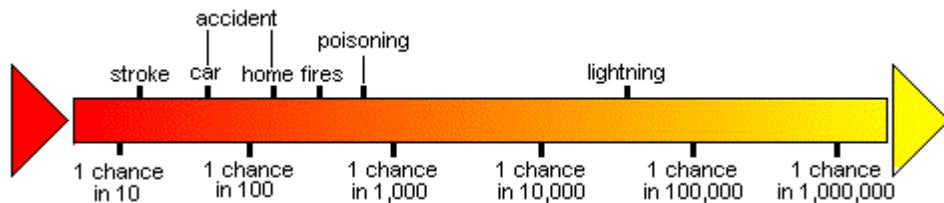


Diagram is taken from US EPA Office of Air and Radiation Publication, "Air Pollution and Health Risk." EPA 450/3-90-022, March 1991. (http://www.epa.gov/ttn/atw/3_90_022.html)

For noncancer health effects, risk is often described in terms of the hazard quotient. Hazard quotient (HQ) is the ratio of the estimated ambient air concentration to US EPA's reference dose for the chemical. The reference dose is the level of a chemical below which it is reasonable to expect negligible harmful effects if exposed over a lifetime.

The purpose of the assessment is to gain a better understanding of the risks from inhalation exposure to certain HAP, specifically those determined to be of most concern in urban areas. The assessment provides US EPA and the states with information to help prioritize data and research needs to better assess risk.

US EPA plans to regularly update this assessment with the next update, based on 1999 emissions data, expected in 2003.

How the data were evaluated –

BY COUNTY

IDEM identified the top ten counties using the cumulative average cancer risk for each county in the state. The cumulative average cancer risk is the average across all census tracts in the county. The cumulative risk is the sum of risk numbers for each HAP. Risk numbers are calculated by multiplying the exposure estimate by the unit risk factor. A unit risk factor is used to estimate the probability of getting cancer and is different for each carcinogen. There are 3 NATA pollutants that do not have cancer probability rates (unit risk factors); they are manganese, acrolein, and mercury.

BY HAP

IDEM identified the HAP contributing the most to the risk numbers for the top ten (10) counties for Cumulative Average Risk (Cancer). IDEM also assessed the top census tracts in each of the counties to identify the HAP that were driving the cumulative risk numbers. Any HAP with a risk number greater than 10 in one million (10^{-5}) was included in the list. Also, included in the list was any HAP with

a hazard quotient (noncancer) greater than one in at least one census tract in the state.

BY SOURCE SECTOR

IDEM identified source sectors emitting one or more of the HAP identified as driving cancer and noncancer risk, using the 1996 NTI database.

Findings –

NATIONALLY

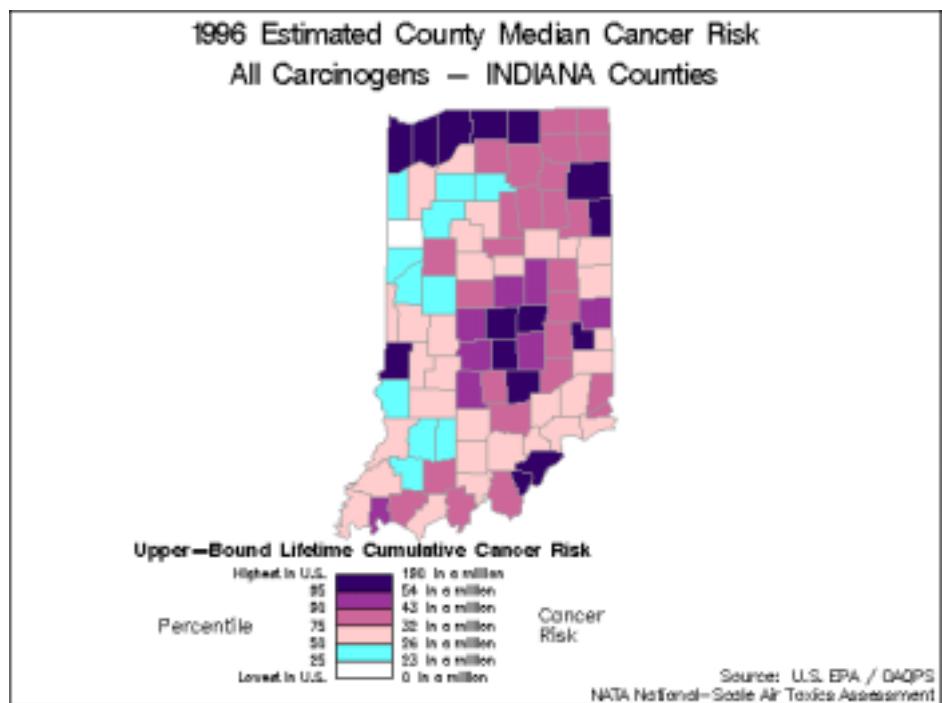
- Inhalation exposure to 24 of the 32 HAP present either noteworthy carcinogenic risk or the potential for chronic noncancer health effects when viewed on a national scale or across broad regions of the country. Due to the limitations and uncertainty in the assessment, the other 8 HAP may still pose risks not captured in this assessment (e.g., more localized problems, or risk from other ways of exposure, like eating fish).
- Three HAP (chromium, benzene, and formaldehyde) appear to pose the greatest nationwide carcinogenic risk. One HAP, acrolein, is estimated to pose the highest potential on a nationwide basis for significant chronic noncancer effects. While acrolein is primarily emitted by mobile sources, it is also used commercially and is emitted from wood fires.
- In addition, four HAP (arsenic, 1,3-butadiene, coke oven emissions, and polycyclic organic matter) appear to pose carcinogenic health threats in some regions. Five HAP (acetaldehyde, arsenic, 1,3-butadiene, formaldehyde, and manganese) have a potential to pose significant chronic noncancer effects in some regions.

INDIANA

The national county-level cumulative average estimated risk (cancer) is 55 in one million. The statewide cumulative average estimated risk (cancer) is 60 in one million. See Appendix D.

The following map illustrates the cumulative *median* estimated cancer risk for Indiana Counties. IDEM used the cumulative *average* estimates for its analysis because there are instances where using the median skews the results. For example, Fayette County (the smaller county located east of Marion County on the map) is reflected as having among the highest risk in the state. This is based on chromium emissions in a few of the census tracts. However, because Fayette County has only seven census tracts compared to Marion County, which has over 200 census tracts, use of the median estimates can make the risk estimates look comparable or worse. Several counties have several census tracts with chromium emissions significantly greater than those in Fayette County. However, use of the median estimate makes their risk estimates appear lower.

The map is included in the report because, with a few exceptions like Fayette County, the relative risk ranking across the state is similar regardless of whether the median or the average estimates are used.



COUNTIES

The top ten counties based on cumulative average risk (cancer) are represented as xx-in-a-million:

<u>Rank</u>	<u>County</u>	<u>Risk Value</u>	<u>HAP Driving Risk***</u>
1	Adams*	197	arsenic, chromium
2	Marion	108	chromium, benzene, coke oven gas (COE), polycyclic organic matter (POM), formaldehyde, quinoline
3	Allen	87	chromium, nickel, formaldehyde, benzene
4	Lake	75	chromium, benzene, COE, cadmium, POM, formaldehyde
5	Bartholomew	74	chromium
6	Porter	73	chromium, benzene, COE
7	Johnson	72	chromium, benzene, formaldehyde
8	Elkhart	70	chromium, benzene, formaldehyde
9	LaPorte	66	chromium, benzene, COE, formaldehyde
10	Steuben**	59	chromium

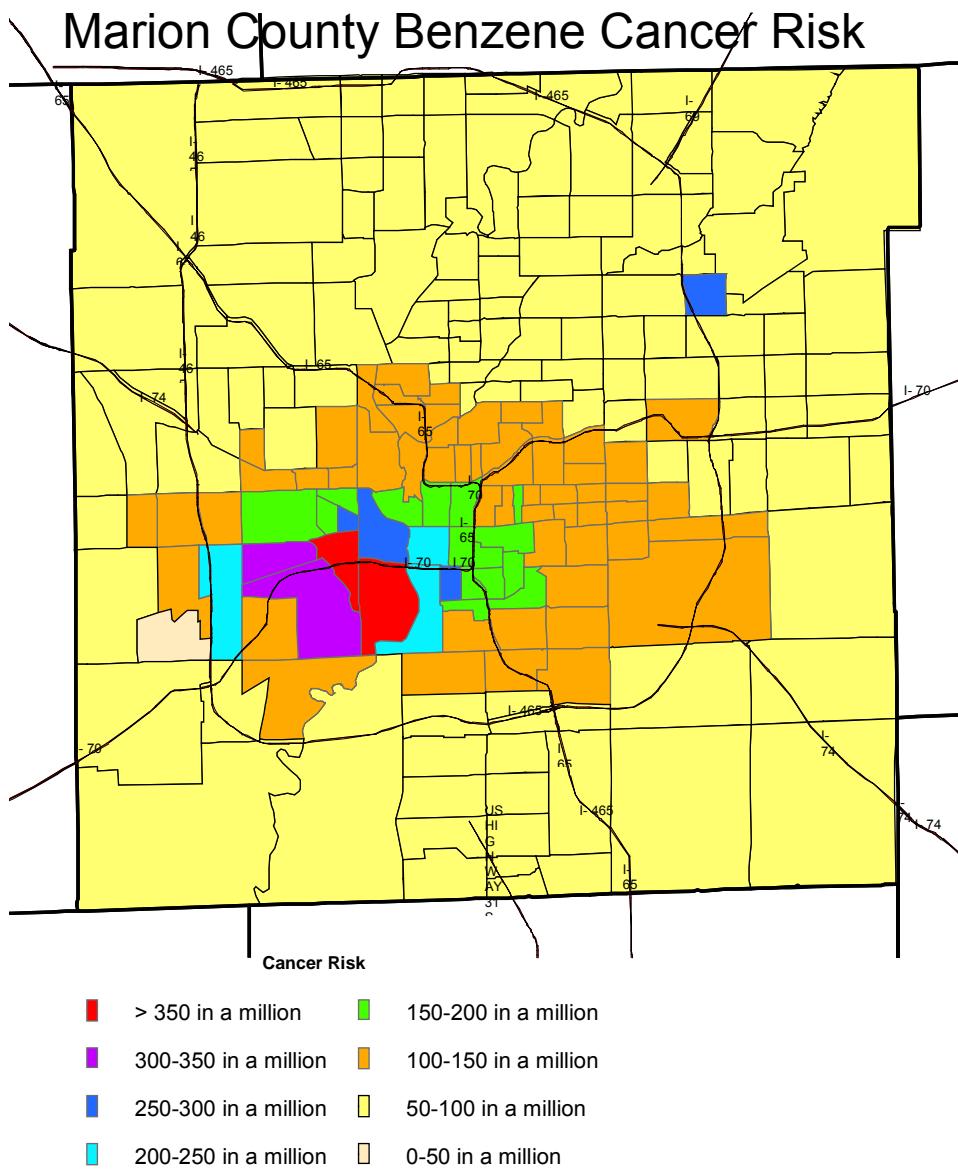
* The one source contributing most of the risk reported no emissions in 2000 of the HAP (chromium) driving the risk estimate. 10,000 pounds were reported in the 1996 data used in NATA.

**The one source contributing most of the risk is closed.

***Only the key HAP driving risk are listed in this table. Other HAP may present significant risk concerns and may included in the inventory of pollutants listed in Section IV of this report.

There are 21 census tracts (sub-county level) with cancer risk estimates greater than 200 in one million. Eleven of these census tracts are located in Marion County, with estimate to have cancer risk greater than 563 in one million. The greatest estimated risk is for a census tract in Allen County (675 in one million). See Appendix D.

As an example...



HAP

With the exception of Porter County, chromium (compounds) is the major contributor to the cancer risk estimates. In most instances, the cancer risk estimate for chromium is about 2 times greater than the next identified contributor. Coke oven emissions are the major contributor to cancer risk estimates in Porter County. Benzene, formaldehyde and polycyclic organic matter (POM) contribute significantly to cancer risk estimates in most urban counties.

The following HAP present a cancer risk estimate greater than one in a million in at least one census tract in the state:

- Acetaldehyde
- Acrylonitrile
- Arsenic Compounds
- Benzene
- 1,3 - Butadiene
- Cadmium Compounds
- Chromium Compounds
- Coke Oven Emissions
- Ethylene oxide
- Formaldehyde
- Methylene chloride
- Nickel Compounds
- Perchloroethylene
- POM Total
- Quinoline
- Trichloroethylene

Every census tract in the state has a cancer risk estimate from HAP exposure greater than one in a million.

The following HAP present a noncancer risk estimate (HQ) greater than one in at least one census tract in the state:

- Acrolein
- Manganese Compounds

All but ten (10) counties in the state have a cumulative HQ greater than one. Consistent with the national risk estimate, acrolein is the major contributor to chronic noncancer risk estimates in most areas of the state. Manganese is a major contributor to chronic noncancer risk estimates in Kosciusko, Bartholomew, LaPorte, and Clark Counties. See Appendix D.

Health effects information on each of the above chemicals is available from US EPA's Air Toxics Web Site <http://www.epa.gov/ttn/atw/hapindex.html>

SOURCE SECTORS

As indicated above, IDEM identified the contributing sources for each HAP listed above. Source sectors identified include:

- mobile sources
- primary metals industries
- fabricated metals industries
- metals finishers
- gasoline distribution
- wood preserving
- area sources

TWO FINDINGS OF NOTE –

There are 1383 census tracts in Indiana. Point and area sources are the major contributors to cancer risk estimates for 99 of the 100 census tracts with the highest risk estimates. The top 100 census tracts – with an estimated aggregated population of over 350,000 Hoosiers – all have an estimated risk greater than 113 in one million. These census tracts are spread across 14 different counties. See Appendix D.

Wood preserving was identified as a source sector of concern because one source located in Vigo County emits quinoline, which is considered extremely potent carcinogen.

The following are strengths and weaknesses of US EPA's NATA.

Strengths –

The NATA is helpful for:

- determining where additional air quality monitoring may be appropriate and which pollutants should be monitored;
- assessing the relative contributions to air toxics concentrations and risks of different types of emissions sources, such as mobile sources, major industrial sources, and smaller area sources.
- setting priorities for collecting additional HAP data and research to improve estimates of HAP concentrations and their potential public health impacts.
- screening potential risks at the local level to identify potential hot spots requiring more refined local analysis.

Weaknesses –

- There are a number of limitations and uncertainties related to assumptions. More information on the limitations and uncertainties may be found at <http://www.epa.gov/ttn/atw/nata/natsalim2.html>
- Inaccurate or incomplete emissions information significantly impact accuracy of the model.
- The dispersion model tended to underestimate the ambient concentrations of the HAP assessed; review of IDEM metals monitoring data reflect this could be by several orders of magnitude in certain instances.
- The assessment is based on 1996 emissions data that do not reflect HAP reductions that have taken effect since 1996, including those from federal, state and local regulations or from industry initiatives or facility closures.
- Quantifies estimated incremental risk; does not account for normal expected rate of developing cancer due to other factors (e.g., behavioral characteristics or other factors).
- Assumes significant background levels of certain HAP; in some cases the background levels account for up to 50% of the estimated risk.

Ways to Improve the Data –

- Improve emissions information.
- Refined analysis of local hot spots.
- Additional monitoring data to calibrate or assess air concentration projections to determine whether NATA can be used to reasonably predict HAP levels in areas where monitoring is not occurring.

➤ US EPA's TRI Risk-Screening Environmental Indicator (RSEI) Model

Description –

US EPA has developed a computer-based model, known as the Risk-Screening Environmental Indicator (RSEI) model, that permits screening-level analyses using TRI data. The model supplements the emissions based TRI information by incorporating information and models that assess, at a screening-level, the risk-related trends of chemical releases. The model allows for assessment of chemicals by toxicity-weighting and based on exposed populations. It currently focuses only on chronic exposures and health effects.

How the data were evaluated –

The model allows assessment using different settings. For this report, the model was set to “Full Modeled Value.” The full modeled value provides the risk-related results obtained by calculating the product of the surrogate dose (estimated using exposure models), the chemical's toxicity weight, and the exposed population.

The model output was evaluated similar to the NATA. IDEM identified eight counties with the highest risk ranking, followed by the chemicals driving the risk and then the source sectors that reported releases of those chemicals in the identified county.

Findings –

Counties of Concern

	Chemicals [Sources]
• Allen	chromium, manganese, nickel, lead [specialty steels]
• Marion	manganese, chromium, triethylamine, arsenic [foundry, secondary lead smelting]
• Lake	lead, arsenic, manganese, POM [primary metals]
• St. Joseph	manganese [specialty steel]
• Delaware	lead, nickel [manufacturing, secondary lead smelting]
• Clark	manganese [ship building/ship repair]
• Kosciusko	chromium, manganese, nickel [foundry]
• St. Joseph	chromium [manufacturing, metal finishing]

Some of the counties of concern (e.g., Clark) are different than those identified in some of the other analyses because the model uses only TRI data and applies a high toxicity-weighting to metals.

A complete table summarizing IDEM's RSEI Model results is available in Appendix E.

The following are strengths and weaknesses of US EPA's TRI RSEI Model data.

Strengths –

- Serves as a good screening tool to identify potential hot spots requiring more refined local analysis, including identifying where additional air quality may be appropriate.
- Peer-reviewed nationally.

- Incorporates toxicity characteristics, exposure and population with mass release data.
- Multi-media component.

Weaknesses –

- There are a number of limitations and uncertainties related to assumptions in the application of the models used, and necessary to address information gaps in model inputs.
- Limited to TRI data only; therefore, focuses only on stationary point sources.
- Cannot modify model inputs.
- Toxicity-weights are based upon the single, most sensitive health-endpoint for inhalation or oral exposure pathways, and do not reflect severity of effects or multiple health effects.
- Does not address acute health effects.
- Significant assumptions are made regarding metals; they are assumed to be released in the valence (or oxidation) state with the highest toxicity (i.e., chromium is assumed to be released as hexavalent chromium, Cr⁺⁶) and this is not necessarily true.
- Indicator results do not provide quantitative risk estimates (e.g., xx in a million); it provides a relative estimate.
- Does not account for all sources of TRI chemicals, only those who report to TRI.

Ways to Improve the Data –

Because the RSEI is developed and maintained by US EPA and directly incorporates TRI data, the outputs (data) would be best improved by improvements in TRI reporting. It would also be helpful to be able to modify inputs into the model (i.e., be able to import other emissions information).

D. Health Data

Description –

Available health data, specific to Indiana, that would allow reasonable inferences to link health outcomes (e.g., cancer or birth defects) to environmental exposures is very limited. Cancer incidence by type and birth defects are required to be reported by physicians under state law, but such reporting is not complete.

The Cancer Incidence in Indiana Report published by the ISDH provides the most relevant health data for this assessment. The most recent report, published April 2001, presents 1996 cancer incidence data. A copy of the report is available at <http://www.IN.gov/isdh/dataandstats/cancerinc/1996/index.htm>

Currently, limited birth defect information is available. However, recent legislation (SEA 139) established new reporting requirements, effective July 1, 2002. A copy of the legislative is available at <http://www.IN.gov/legislative/bills/2002/SE/SE0139.1.html>

How the data were evaluated –

Evaluated the Cancer Incidence in Indiana Report to identify any high cancer incidences. Information was viewed on a state-wide and county-specific level.

Findings –

In general, the cancer incidence rates in Indiana are consistent with national rates. The one exception is the incidence of lung cancer in Indiana, which is higher than the national average. This is believed to be due to a greater level of cigarette smokers in the state.

The following are strengths and weaknesses of available health data.

Strengths –

- Cancer incidence rates are available for Indiana, including specific type of cancer, age, sex and geographic location.

Weaknesses –

It is difficult to link health outcomes with specific environmental exposures. The reasons are many, including but not limited to:

- Lack of available and accurate data concerning health effects or cancer or other disease.
- Inconsistencies that exist between environmental and health data (e.g., by location and time period, especially with delayed onset of illness).
- Response variability in exposed populations.
- Lack of peer reviewed epidemiological studies.
- Technical inability to directly link cause and effect – many assumptions, uncertainties and subject choices are built into assessments.

The importance of the environment, and of HAP in particular, as causes of cancer has not been accurately established, and may never be. Much of the knowledge about adverse health effects of HAP is derived from higher occupational exposures or animal studies. For many individual HAP, the expected increase in the lifetime risk of cancer is estimated in the one in a million range.

In the instances where incremental risk is one in a million, this produces 5 to 6 excess cases per year in Indiana. It is difficult to detect this increase against the background of the approximately 25,000 new cancer cases reported each year in Indiana. Other issues make environmental health effects studies problematic: mobile populations, lack of exposure and occupational histories of cases, lag time between exposure and disease, absence of data on illnesses other than cancer, and high costs.

Because of these difficulties, public policy is often developed around potential risk rather than actual outcome. If a chemical is demonstrated to cause cancer, birth defects or other health problems in occupational or animal toxicity studies, it is sound policy to reduce its release into the environment. This approach was the basis of the 1990 Amendments to the Clean Air Act, which required, first, maximum emission reductions, given available technologies used by the best controlled sources in an industry, and second, assessment to determine whether the remaining public exposures to HAP emissions are at an acceptable level to protect the public health.

Ways to Improve the Data –

- More timely and complete reporting by physicians. Maybe strengthen reporting requirements for physicians and medical facilities.
- Work with states to improve data sharing.
- Developing and maintaining a database for use by the public.

E. Other Information

In addition to the technical assessment, staff reviewed other available sources of information, such as the Environmental Defense Scorecard, and met with various groups and individuals to solicit their input and ideas on development of this strategy. Stakeholders included:

- The Air Toxics Advisory Group
- The HAP Emissions Reporting Workgroup
- Utilities
- The Indiana Chamber of Commerce
- The Indiana Manufacturers' Association
- Environmentalists/Environmental Groups
- Representatives of various manufacturers

Issues discussed included the technical analysis and its findings, criteria for selecting priorities and next steps.

➤ **Scorecard**

The Environmental Defense, a leading national nonprofit environmental organization has developed a Scorecard, which combines exposure data from NATA with health effects information to estimate the health risks posed by chemical pollutants in ambient air. US EPA exposure estimates, and the Scorecard risk estimates that are based on them, provide a screening-level assessment of hazardous air pollution problems and are subject to important caveats. Scorecard's risk estimates are calculations based on models. They are useful for ranking purposes, but are not necessarily predictive of any actual individual's risk of getting cancer or other diseases. More information on ScoreCard may be obtained at <http://www.scorecard.org/>

Scorecard was evaluated to identify any HAP of concern that might not have been identified in another part of the analysis.

The Scorecard results did not reveal any new HAP, areas or sectors of concern. With respect to cancer risk, it estimated an average individual living in Indiana as having an added cancer risk of 720 in one million, with most of the risk due to diesel emissions. With respect to noncancer risk, it calculated the average individuals cumulative HQ as 2. This means that most individuals living in Indiana can expect some noncancer health effects over their lifetime due to exposure to HAP. Most of the noncancer risk estimate was due to exposure to acrolein.

F. Information Needs

Some risk issues are regional or even national in nature (e.g., benzene, mobile sources), but most are local. Whether it's a large steel mill or manufacturer that might affect the broader community or a small dry cleaner located near a residence or another business, each can present risk to an exposed population.

As discussed earlier, no single tool can alone be used to assess and reduce risk, but rather several tools must be used in unison. Monitoring, modeling and emissions data provide important pieces of the puzzle. It is important that the information provided by the available tools be as accurate and complete as possible to allow for a credible estimate of risk.

This section of the report focuses on what information is necessary to assess and address risks resulting from exposure to HAP. It also looks at options for obtaining this information and recommends the preferred option, factoring in costs and available resources to collect and manage the information.

Emissions Data

Identification of HAP risks for further monitoring and risk assessment needs to be based on a variety of tools, including emissions data and modeling assessment.

Emissions data are an important tool in risk characterization because they provide information necessary to identify potential ‘hot spots,’ either directly or as a required element of air dispersion modeling. Emissions data are also important to identify sources of monitored HAP of concern.

Currently, IDEM and ISDH do not have the authority to require sources to provide HAP emissions information. As described earlier in the report, emissions information is available through TRI and emissions estimates developed by IDEM. However, there are significant gaps and differences with the available data:

- Statewide point source HAP emissions were estimated in RAPIDS at 109.5 million pounds compared to 68.2 million pounds reported to TRI – a 60% difference. Possible reasons for these differences are discussed in Section III of this report.
- Not all sources that report HAP emissions, either to TRI or the state, report everything that they emit according to our estimates, based on their processes.
 - Some HAP of concern may be below TRI reporting thresholds for many sources (e.g., benzene, which has a reporting threshold of 10,000 pounds).
 - Some of the information provided is incomplete or inaccurate, leading to concerns about data quality. Some sources report different numbers to TRI than are reported voluntarily to the state.
- Several HAP of concern can be reported to TRI in emission ranges, significantly skewing assessment results. This is especially true for HAP emitted at lower levels, such as metals.

What is needed?

Available data point to significant risk issues, yet some of data used to reach these conclusions is incomplete or may be inaccurate. Further, these data indicate that point, area (smaller) and mobile sources all contribute significantly to HAP risk in Indiana.

IDE� and ISDH need the authority to require sources to provide specific HAP emissions information by request, as needed, to further assess potential health risks and additional information on those HAP which the data show pose the greatest risk in Indiana. Based on information compiled to date and summarized in this report, IDEM believes that if such authority existed by rule today, it would be exercised for a limited number of contaminants to address specific identified potential health issues.

IDE M and industry need to establish a process to work together to share information and to develop better emission factors, either through process-specific testing or improved models and engineering calculations.

Mobile source HAP emissions needed to be updated using the latest US EPA developed models.

Public Access to Information

While TRI data meet most public information needs, it does not meet all public information needs. There are many non-government persons who review and assess environmental data. Access to more complete and accurate emissions information, and the ability to request emissions information from sources with air permits, should be considered.

Monitoring Data

Monitoring data are an important tool in risk characterization because they provide important evidence of potential exposure to chemicals. Monitoring data can be used to confirm problems identified using other tools. If modeling or emissions data indicate a possible concern, local or special-purpose monitoring can be used to confirm whether a problem exists.

However, caution should be exercised in estimating actual exposure from monitoring data because many factors affect the representativeness of monitoring data, including location, analysis methodology, and localized influences (e.g., topography and meteorology).

HAP monitoring is very expensive. No single instrument or monitoring methodology can measure ambient concentrations of all chemicals that might be of concern in an area. IDEM has estimated the cost of monitoring all chemicals listed in the proposed amendments to the state emissions reporting rule, using US EPA approved methods, to be roughly \$300,000 per monitoring site. The technical and practical capability does not exist to monitor all possible chemicals of concern at levels that might present concern. Additional information on monitoring costs is available in Appendix F.

In these instances, information provided by other tools, such as emissions data and modeling, are necessary to fill gaps information gaps. These tools are also important in identifying potential 'hot spots' for monitoring HAP.

What is needed?

Available information indicates that additional HAP monitoring in Indiana is warranted, specifically for pollutants and areas of concern.

It is essential that broader population-exposure oriented monitoring continue in the communities currently monitored. These communities have the largest populations in the state and it is reasonable to monitor air quality where the largest number of people live. Further, two-years worth of data does not provide sufficient information to assess long-term air quality trends.

The assessment indicates that additional monitoring locations are warranted, such as population-exposure oriented monitoring in Allen County and source-specific monitoring in geographic areas of concern (e.g., Southwest Indianapolis). In addition, metals monitoring in counties where risk is driven by such emissions should be instituted to confirm whether a real concern exists. It is quite possible that, due to emission reporting inaccuracies, the models may not be accurately predicting metals exposure potential. POM, formaldehyde and quinoline are also chemicals that should be monitored in communities where increased risk is indicated.

Finally, IDEM should continue to participate in three ongoing monitoring assessments. The first is the joint mercury deposition study with the US Geological Survey. This project is in the third of four years and receives significant funding support from the US Geological Survey. As indicated earlier in the report, it is providing important data for assessing mercury deposition in Indiana. The second is a local assessment project in Indianapolis. This project involves monitoring HAP, using a continuous sampler, and other HAP (e.g., POM) at IPS School #21. Previous monitoring assessment indicated a potential air risk concern at the school and in the nearby community. This project is expected to receive significant funding and technical assistance by US EPA. The third is an assessment of particulate matter, ammonia and hydrogen sulfide emissions downwind of a large confined feeding operation in Pulaski County.

Because of resource and assessment methodology constraints, we need to monitor where different tools or data (e.g., emissions data, modeling) point to the same concern. To deploy limited monitoring resources to the greatest effect, it is necessary to improve emissions information and modeling tools. Emissions data and the use of models can help prioritize the deployment of monitors.

Modeling Needs

More modeling assessment is needed, specifically refined analysis of local 'hot spots' in areas of concern identified by other tools, such as monitoring data, emission estimates or NATA. Emissions data are a required element of air dispersion modeling, therefore, accurate and complete emissions information are needed. Inaccurate or incomplete emissions data can lead to the wrong

assumptions about whether a risk concern exists or what might be contributing to that concern.

Air dispersion modeling tools are currently available to address local and regional air quality modeling needs. However, improved tools and methods are being developed, and will be available very soon, that will increase our ability to better characterize toxic plumes. These tools include dispersion models as well as emission and exposure models. Training on these state-of-the-art models is needed to build capacity and ensure that the best tools are being used. Also, improving the completeness and accuracy of the model inputs (e.g., emissions, source characterization information, and meteorological data) along with using additional monitoring data to corroborate the modeled estimates will help make sure the tools are accurately predicting HAP concentrations.

Health Data

As discussed earlier in the report, the two most pressing needs related to health data are the need for more timely and complete reporting by physicians and sharing of data by adjacent states.

IDEQ and ISDH will continue to work together to identify, where possible, health effects due to HAP. However, action to address HAP in Indiana should not depend on nor wait for demonstrated adverse health effects using environmental data.

Regardless of the data evaluated, some criteria must be available to assess whether risk is unacceptable. Indiana does not have a specific ‘acceptable’ level of risk or an action level other than that established in federal programs, such as Superfund. Such criteria could even differ based on the size of the exposed population, the type of analysis, or emissions being examined (e.g., new or existing source).

US EPA’s CEP benchmarks have been chosen because they are conservative and have been through peer review. Additional research is necessary to determine whether other available criteria or benchmarks might be appropriate. Other nearby states, for example, Michigan and Wisconsin, have benchmarks that trigger control technologies for new sources, based on modeling assessment.

Public Perception and Involvement

One key element missing from this report is public perception and involvement. What is the public perception of HAP in Indiana? Do people perceive HAP to be a concern? If so, what do they believe needs to be done? What HAP information does the public believe should be collected? Are there regional or geographical differences in perception? At what point is the public most interested and most likely to be engaged in HAP issues?

This report provides information on estimated risk due to exposure to certain chemicals or based on where you live. The estimated risk is presented as ‘incremental’ risk, that is to say, the risk of contracting cancer or suffering illness in addition to the normal ‘expected’ rate due to other factors (e.g., behavioral, genetic, and other exposures). What is not known is whether the public understands the risk levels in Indiana and whether these levels would be perceived as a call for action.

The public needs to be involved in the decision-making process, especially at the local level. In many instances, areas of concern identified in this report qualify as environmental justice areas. The departments need to work to identify public education and information needs as well as opportunities for involvement. Public perception and involvement will be important elements in the next steps of confirming, prioritizing and addressing risk concerns.

> Options for Filling Gaps in HAP Data

SEA 259 requires the departments to identify options for filling identified gaps in existing data, specifically emissions, monitoring, and health data. Following are a number of options intended to provide more complete information on HAP emissions, levels of HAP in the ambient air, and health impacts.

Emissions Data

1. Continue to use the current approach of requesting voluntary reporting by sources subject to the current annual (criteria) pollutant emissions reporting requirements.
2. Request sources to provide HAP emissions data voluntarily upon request.
3. Address data quality and completeness concerns with US EPA’s Toxic Release Inventory data.
4. Establish regular HAP emission reporting for all 188 HAP listed in the Clean Air Act or a subset of that list.
5. Establish authority for the department to collect specific HAP emissions information by request, as needed, to further assess potential health risks and additional information on those HAP which the data show pose the greatest risk in Indiana.
6. Update mobile source HAP emissions using the latest US EPA developed models. IDEM will be able to do this as soon as the RAPIDS steering committee agrees on the emission estimation protocol and pending revisions to US EPA’s mobile source emissions models.

Monitoring Data

1. Continue monitoring in 4 urban areas, established under ToxWatch.
2. Continue monitoring in 3 special monitoring assessments (e.g., IPS School #21, mercury deposition, and downwind of confined feeding plant)
3. Expand monitoring for geographic areas of concern, metals, of specific sources of concern.

Health Data

1. Develop proficiency in modeling human health impacts of HAP.
2. More timely and complete reporting by physicians and sharing of data by adjacent states.
3. Develop reports that identify potential problems and make the information available to the public.

> Preferred Approach for Filling Gaps in HAP Data

SEA 259 requires the departments to identify their preferred approach for filling identified gaps in existing data, specifically emissions, monitoring, and health data.

1. The analysis of existing data contained in this report supports the need for additional HAP emissions information to assess potential health risks and when there is an existing or suspected health risk. The most effective and the preferred approach would be to establish authority for the departments to collect specific HAP emissions information by request, as needed, to further assess potential health risks and additional information on those HAP which the data now show pose the greatest risk in Indiana.

This approach would allow the department to collect HAP emissions information in a focused manner that addresses specific risk issues, at least cost to sources than a broad-based HAP reporting rule or even broader authority to require resource-intensive stack or emission testing.

As indicated earlier in the report, IDEM believes that if such authority existed by rule today, it would be exercised for a limited number of contaminants to address specific identified potential health issues. IDEM is hopeful that discussions with stakeholders in the short-term will clarify current priorities and the specifics of a reporting mechanism.

2. Given the breadth of options and costs of monitoring, the departments will work with stakeholders to develop a plan for expanded HAP monitoring based on the results of this analysis taking into account available resources.
3. The departments' preferred approach is to use modeling to identify areas of possible concern rather than to focus limited resources on epidemiological studies and enhanced collection of health data.

SECTION IV – INVENTORY OF CONCERNS

One of the requirements of SEA 259 is to develop an inventory of sources, source categories and HAP that require additional study to determine human health impacts. The identified concerns in this section are based on available data, which in some cases may be incomplete or inaccurate. Therefore, listing of a chemical, source category or geographic area does not mean that a real or confirmed risk concern has been identified. Rather it means that available data point to a concern requiring action or additional assessment.

As indicated above, this inventory was developed after a review of available data. Something was included on the list if any data set pointed to it as a possible concern. The tables are broken down by chemical, counties and source sectors of concern. A map of the counties of concern is included.

SEA 259 Analysis – HAP of Concern

#	Chemical/Group	Source*				
		ToxWatch	NATA	RAPIDS	TRI RSEI	Other
1	1,1,1-trichloroethane			X		
2	Acrolein		X			X
3	Arsenic compounds				X	
4	Benzene	X	X	X		X
5	Carbon disulfide					X
6	Chloromethane	X				
7	Chromium compounds		X		X	
8	Cobalt				X	
9	Coke oven emissions		X			X
10	Diesel emissions					X
11	Diiocyanates					X
12	Dioxin					X
13	Ethylbenzene			X		
14	Formaldehyde		X	X		
15	Hydrochloric acid			X		
16	Hexane			X		
17	Hydrogen fluoride			X		
18	Lead compounds				X	
19	Manganese compounds		X			X
20	Mercury					X
21	Methanol			X		
22	Methylene chloride			X		
23	Nickel compounds		X		X	
24	PBTs					X
25	POM/PAH		X			X
26	Quinoline		X			
27	Styrene	X		X		
28	Toluene			X		
29	Trichloroethene	X				
30	Triethylamine				X	
31	Vinyl chloride	X				
32	Vinylidene chloride	X				
33	Xylenes			X		

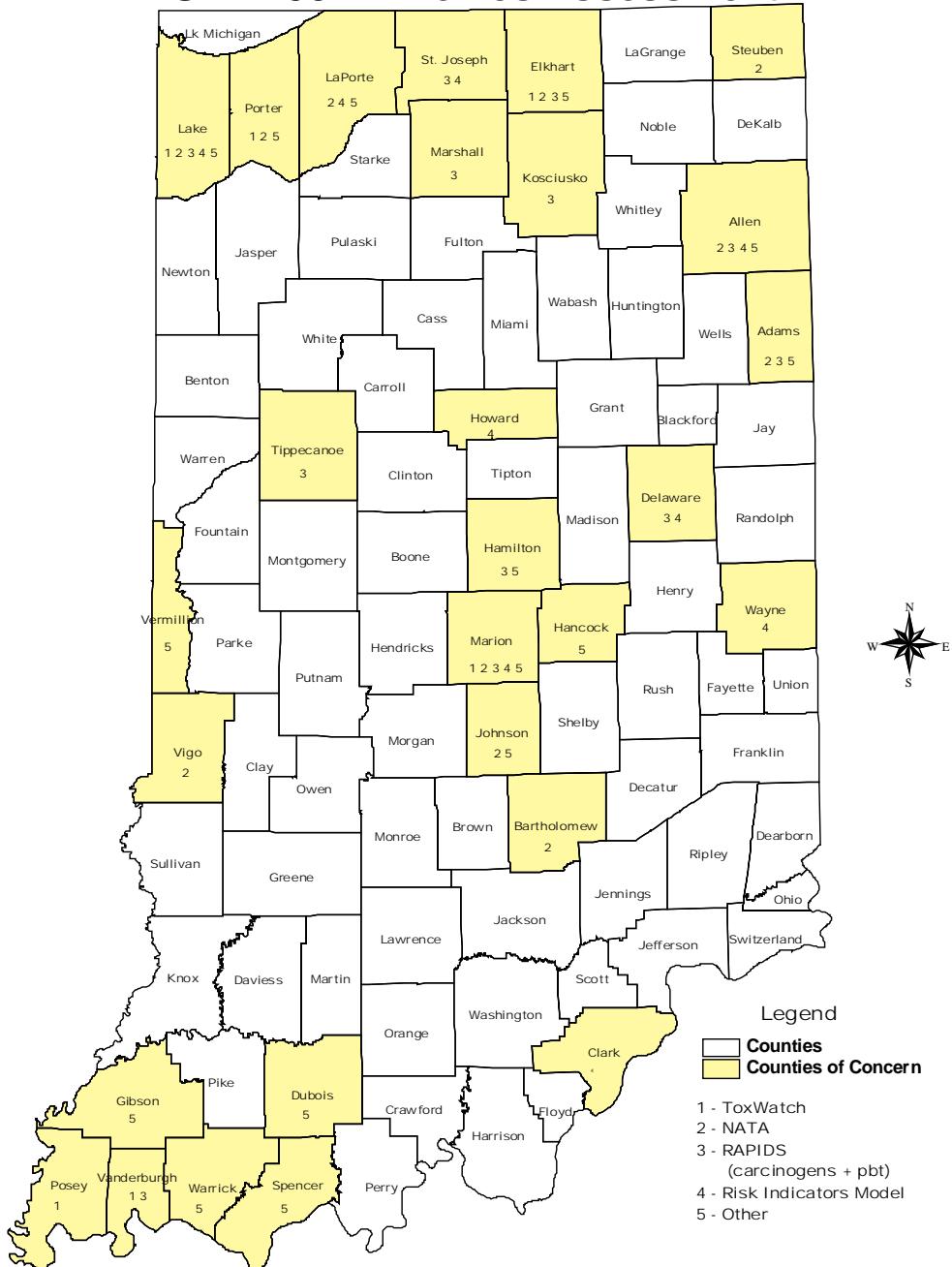
*Other includes Scorecard, stakeholder input, or institutional knowledge (e.g., dioxin).

SEA 259 Analysis – Counties of Concern

#	County	Source*				
		ToxWatch	NATA	RAPIDS	TRI RSEI	Other
1	Adams		X	X		X
2	Allen		X	X	X	X
3	Bartholomew		X			
4	Clark				X	
5	Delaware			X	X	
6	DuBois					X
7	Elkhart	X	X	X		X
8	Gibson					X
9	Hamilton			X		X
10	Hancock					X
11	Johnson		X			X
12	Kosciusko			X	X	
13	Lake	X	X	X	X	X
14	LaPorte		X		X	X
15	Marion	X	X	X	X	X
16	Marshall			X		
17	Porter	X	X			X
18	Posey	X				
19	Spencer					X
20	St. Joseph			X	X	
21	Tippecanoe			X		
22	Vanderburgh	X		X		
23	Vermillion					X
24	Vigo		X			
25	Warrick					X

*Other includes Scorecard, stakeholder input, or institutional knowledge (e.g., dioxin).

Indiana Counties of Concern: SEA 259 Air Toxics Assessment



SEA 259 Analysis – Sources of Concern

Sector	Source				
	ToxWatch	NATA	RAPIDS	TRI RM	Other
Electric, Gas and Sanitary Services			X	X	X
* Electric Utilities					
* Incinerators					
* Landfills					
* POTWs					
Mobile Sources	X	X	X		X
Primary Metal Industries		X	X	X	X
* Steel Mills					
* Slag Processing/ Reclam.					
* Coke Ovens					
* Primary Aluminum Prod.					
Fabricated Metals Industries		X	X	X	X
* Foundries					
* Automotive Manufacturing					
* Transportation Equip. Mgfr.					
Metal Finishers		X	X	X	X
Fuel Distribution	X	X	X		X
* Petroleum Refineries					
* Fuel Distribution/Refueling					
Plastics and Rubber Mgfr.	X		X	X	X
* Fiberglass					
Chemical Production			X	X	X
Pharmaceutical Production			X		X
Vegetable Oil Production					X
Wood Preserving		X			
Stone, Clay, Glass and Concrete Production			X		
Miscellaneous Mgfr.			X		X
Area Sources		X	X		X

*Other includes Scorecard, stakeholder input, or institutional knowledge (e.g., dioxin).

SECTION V – PRIORITIES

IDEM and ISDH have identified a set of priorities for implementation over the next five years. These priorities include activities and programs that are already underway and additional recommendations for future action. The framework of these priorities is generally consistent with the approach to air toxics taken by Indiana since the Clean Air Act was amended in 1990. Detailed workplans will be developed as part of the US EPA/State Environmental Performance Partnership Agreement (EnPPA) process.

- Continue to implement federal requirements established under Section 112 of the Clean Air Act. Also, continue to implement other federally-mandated programs, such as the Clean Car Check Program in Lake, Porter, Clark and Floyd Counties.

Basis – Implementation of the MACT program is the most effective means of maximizing emission reductions from HAP emitting sources. The state is required to implement Section 112 requirements as part of its Title V operating permit program.

Areas of Focus –

- Compliance, permitting and program development.
- Operate Clean Car Check Program in Lake, Porter, Clark and Floyd Counties. While this program is required to reduce ozone pollution, it also reduces HAP and particulate emissions from mobile sources.

- Continue to address identified state- or community-specific HAP risk issues not addressed by the Clean Air Act, or that should be addressed in a more timely manner.

Basis – It is sound public policy to address issues where credible evidence supports risk reduction strategy (e.g., reducing styrene emissions from the reinforced composites plastic manufacturing industry or reducing diesel engine idling emission in Northwest Indiana).

Areas of Focus –

- Continue working with communities to explore innovative voluntary mobile source emission reduction programs.
- Continue to promote diesel emission reduction initiatives, including local retrofit projects and supporting the truck stop electrification project in Gary.

- Continue to assess suspected state- or community-specific HAP risk issues.
- Basis** – There are some cases where available information points to a problem, but there isn't sufficient information to support a specific risk reduction strategy. In these instances, collecting and assessing additional information is necessary to confirm whether a problem exists (e.g., an assessment of ambient benzene levels near IPS School #21 in Indianapolis indicates a concern but there isn't sufficient information to support a specific risk reduction strategy. Additional assessment will provide a clearer picture what HAP are presenting the greatest risk to the school and community and thus will drive development of the risk reduction strategy).
- Areas of Focus –**
- Complete IPS School #21 assessment (Indianapolis)
 - Detailed assessment of another geographic area
 - Detailed assessment (risk characterization) of metals and metal finishing operations (e.g., coke ovens, foundries, steel mills, electric arc furnaces)
 - Work with stakeholder group to develop amendments to the state emissions reporting rule taking into account the results of this analysis.
 - Assess adding monitoring stations and expanding the list of chemicals analyzed.
 - Determine risk of HAP emissions from utilities to Indiana residents; develop report and recommendations.
 - Determine risk of diesel particulate emissions to Indiana residents; develop report and recommendations.
 - Work with the US Geological Survey to complete the mercury in air deposition study.
 - Complete 15-month monitoring study downwind of a large confined feeding operation in Pulaski County.
 - Assess vinylidene chloride levels in Posey County.
 - Determine opportunities for minimizing HAP emissions during new source review.
- Continue to work on preventing pollution, through programs like the Governor's Challenge, small business assistance, and new source review.

Basis – Pollution prevention is a proven, cost-effective approach for reducing the use of toxic chemicals.

Areas of Focus –

- Continue to work with Indiana businesses to reduce HAP emissions

- through the Governor's Challenge and other programs.
- Continue to identify opportunities to assist small businesses in complying with rules and identifying approaches to further reduce HAP emissions.
- Continue the ongoing process of working with stakeholders to identify and address HAP issues.

Basis – IDEM and ISDH have established stakeholder groups to assist in the review of HAP monitoring data and development of amendments to the state emissions reporting rule to establish HAP reporting requirements. This stakeholder input has been effective in identifying where attention is needed.

Areas of Focus –

- Establishing a process for ongoing review and revision of priorities.

Appendices

Appendix A

RAPIDS Emissions Inventory Data

- Appendix A-1** (RAPIDS Pollutant Summary)
- Appendix A-2** (RAPIDS County Summary)
- Appendix A-3** (RAPIDS SIC Summary)
- Appendix A-4** (33 HAPS Alphabetically)
- Appendix A-5** (33 HAPS Point)
- Appendix A-6** (33 HAPS Area)
- Appendix A-7** (33 HAPS Onroad)
- Appendix A-8** (33 HAPS Nonroad)

Appendix B

RAPIDS Toxicity-weighted Data

- Appendix B-1** (33 HAPS Cancer)
- Appendix B-2** (33 HAPS Noncancer)

Appendix C

IDEM Metals Monitoring Data Summary

Tables C1 + C-2 Metals

Appendix D

NATA Findings – Indiana

- Table D-1** (Cancer Risk County)
- Table D-2** (Cancer Risk Census Tract)
- Table D-3** (Noncancer Risk County)
- Table D-4** (Top 100 Census (Cancer))

Appendix E

TRI RSEI Model Results – Indiana

Appendix F

Monitoring Cost Information

RAPIDS Emissions Inventory Data

Appendix A-1 RAPIDS Pollutant Summary

Table A-1

Appendix A -
RAPIDS INVENTORY - INDIANA SUMMARY
1999 Point + Area/1998 Mobile

HAP	POINT	AREA	ONROAD	NONROAD	TOTAL
TOLUENE	6854791.60	17112252.67	25182832.08	7279050.72	56428927.08
HCL	54378891.01	210336.18			54589227.19
XYLEMES ISO	5775732.27	14568200.80	14264978.85	6553717.65	41162629.56
BENZENE	433441.24	1761301.51	5708833.47	2527472.38	10431048.59
HEXANE	4962299.05	4132407.65		1070630.07	10165336.77
FORMALDEHYDE	352417.45	315181.68	5065514.88	3955398.15	9688512.17
XYLENE,M	3444.33	36972.04	7351110.43		7391526.80
METHANOL	3274389.73	3849269.46			7123659.19
STYRENE	6012917.40	2308.27	842318.51	108753.24	6966297.43
ETHYLBENZENE	691820.41	913178.37	3651761.93	1669743.87	6926504.58
HF	6845451.24	8.39			6845459.63
METHYLENE CL	4518756.95	1254025.71			5772782.66
TCE,111	34628.29	5527443.84			5562072.13
METH ETH KET	2217337.59	2616748.61			4834086.20
XYLENE,O	1524.04	99289.45	3866581.33	3320.01	3970714.84
TRICHLORETHY	1030083.13	2859840.26			3889923.39
ACETALDEHYDE	190550.00	44022.33	1614224.32	1825218.38	3674015.03
PERC	115585.76	3137242.54			3252828.30
METH ISOBUT	1294703.83	1942060.10			3236763.93
GLYCOL ETHRIS	2189499.85	685479.13			2874978.98
CARBONYL SUL	1657419.64	396.44			1657816.08
NAPHTHALENE	331865.93	668605.80	554205.04	56388.76	1611065.53
BUTADIENE,13	1119.57	42614.68	1136928.51	410635.75	1591298.51
BROMOMETH	8733.39	1319324.04			1328057.43
TRIME-PENTAN	41259.59	415504.99		829594.68	1286359.26
ATRAZINE		1199880.00			1199880.00
DICLPROPE,13		950864.16			950864.16
TRIETHAMINE	909785.05	4986.12			914771.17
PHENOL	873848.41	381.24		4203.94	878433.59

HAP	POINT	AREA	ONROAD	NONROAD	TOTAL
CHLORINE	741173.38	390.02			741563.40
ACROLEIN	20842.87	106098.91	235548.33	314935.41	677425.53
COKE OVEN GS	569870.17				569870.17
HYDROGEN CYA	15810.04	494008.02			509818.06
DICLBENZ,14	96.96	462951.99			463048.95
PROPIONALDEH	24079.47			290787.00	314866.47
MANGANESE	286005.66	1549.75	344.15	1360.51	289260.06
METH METHACR	232665.94				232665.94
ETHYLENE GLY	100873.79	130694.06			231567.85
CUMENE	197569.89	9581.92			207151.81
LEAD	161474.78	4967.01	12767.66	22915.75	202125.20
CRESOL MX IS	172635.00				172635.00
PHENANTHRENE	139343.48	27796.53	66.89	2732.16	169939.05
CYANIDE	144301.33				144301.33
ACETONITRILE	144287.58				144287.58
ETHYLENE OXI	3492.41	130976.10			134468.51
COPPER	77583.37	322.73	41805.55		119711.64
VINYL ACETAT	116690.19	0.26			116690.45
METHYL CHLOR	53463.08	53522.01			106985.09
METH TERT BU	81699.10	127.74		19374.21	101201.05
CARBON DISUL	94401.22	598.12			94999.34
METHENE(B)4-	93528.86				93528.86
ISOPHORONE	84485.36	5627.96			90113.32
DIMETHFORMAM	16625.01	68034.30			84659.31
CHROMIUM	80372.98	1108.36	205.44	1116.79	82803.56
CHLOROETHANE	30759.21	49136.14			79895.35
ACENAPHTHYL	20.77	75527.50		2348.42	77896.69
PHOSPHORUS	77573.95				77573.95
SELENIUM	75786.85	598.17		40.62	76425.64
NICKEL	59507.13	4271.18	272.70	5537.82	69588.83
ANTHRACENE	48731.68	4990.12	11.54	1037.25	54770.59
FLUORANTHENE	45374.77	7839.23	116.24	1169.25	54499.50
DIMETH PHTHA	40260.41				40260.41
HEXCHLORETH	39053.94				39053.94
BENZYL CHLOR	38209.72				38209.72
XYLENE,P	983.10	36972.04			37955.14

HAP	POINT	AREA	ONROAD	NONROAD	TOTAL
BIPHENYL	34057.60	3879.48			37937.08
PRPLENE OXID	36361.80				36361.80
ARSENIC	30958.51	2400.99	10.57	78.99	33449.06
DICHLORETH12	28508.59	4865.65			33374.24
CHLOROFORM	4619.91	23123.66			27743.57
BENZ(A)ANTHR	15860.37	7778.46	99.16	707.82	24445.81
CHRYSENE	15245.21	4929.88	919.04	186.59	21280.72
CRESOL,M	19530.60				19530.60
ACETOPHENONE	15859.16	50.66			15909.82
BENZO(A)PYRE	12765.08	1581.01	80.13	276.38	14702.59
HYDROQUINONE	1066.73	11750.47			12817.20
DIBUTYL PHTH	10027.81	2308.15			12335.96
ANTIMONY	11305.02	6.21			11311.23
PHTHALIC ANH	10910.00				10910.00
COBALT	10563.78	63.10			10626.88
FLUORENE	58.32	8551.91		1759.56	10369.78
PYRENE	21.61	8552.64	149.78	1644.47	10368.50
CRESOL,P	10097.60				10097.60
VINYL CHLOR	3467.49	6259.32			9726.81
DIETHANOLAMI	9499.44				9499.44
METH HYDRAZI	9207.09				9207.09
MERCURY	7801.78	438.51	305.01	337.53	8882.83
ACRYLONITRIL	3994.78	4555.37			8550.15
INDN(123CDPY	3.14	7125.34	17.78	103.95	7250.21
TOLUENE24DII	6073.02				6073.02
DIEYLHEX PHT	6068.36				6068.36
CHLOROBENZ	5275.07	382.52			5657.59
CADMIUM	4743.50	418.59		68.74	5230.83
CHROMIUM VI	4318.73	67.28			4386.01
ACENAPHTHEN	29.40	3566.31		580.24	4175.95
QUINOLINE	4087.26				4087.26
TETCLET,1122	1301.36	2503.72			3805.08
CARBON TETRA	431.53	2982.02			3413.55
BERYLLIUM	2788.27	323.10		47.22	3158.59
VINLIDENE CL	1.42	2784.14			2785.56
ACRYLIC ACID	2671.40	0.02			2671.42

HAP	POINT	AREA	ONROAD	NONROAD	TOTAL
DIMETH SULFA	2599.44				2599.44
BENZO(B)FLUO	0.34	2137.92	112.57	232.02	2482.84
HEXAMETHYL16	2126.84				2126.84
BROMOFORM	2122.99				2122.99
BENZ(GHI)PE	1.62	1425.64	207.44	421.24	2055.94
DIOXANE	1628.89	214.00			1842.89
DIBENZAHAN	0.10	1617.36	13.85	2.00	1633.31
PHENYLENED,P	1100.00				1100.00
BENZO(K)FLUO	0.04	712.90	85.92	226.45	1025.32
CRESOL,O	992.80				992.80
ANILINE	832.00				832.00
TRICLETH,112	481.00	180.83			661.83
TRICLPHN,246	629.32				629.32
METHENE DIAN	580.08				580.08
EPOXYBUT,12	455.90				455.90
DICLETH,11-	171.11	264.28			435.39
CLACETOPHE,2	384.79				384.79
DIMETHYLANIL	321.24				321.24
QUINONE	198.12				198.12
PHOSGENE	161.00				161.00
PRPLENE GLYC	131.00				131.00
TOLUIDINE,O-	113.42				113.42
LEAD OXIDE	102.20				102.20
PROPOXUR	97.20				97.20
DIBROMOET,12	65.71	2.92			68.63
METH IODIDE	48.50				48.50
METH ISOCYAN	34.00				34.00
EPICLHYDRIN	31.80				31.80
DINITRTOL,24	29.81				29.81
DIOCTYL PHTH	2.39	25.00			27.39
CAPTAN	25.00				25.00
CHLOROPRENE	24.00				24.00
NITROPHENL,4	14.42				14.42
ALLYL CHLORI	12.96				12.96
TOL DIAMIN24	12.00				12.00
NITROPROPA,2		11.61			11.61

HAP	POINT	AREA	ONROAD	NONROAD	TOTAL
DICLPROP,12	11.28				11.28
ETHYLENE THI	10.00				10.00
DIBROMO3,12	9.82				9.82
HEXCL-13-BUT	8.98				8.98
PCDF	1.13	5.62			6.75
PROP IM, 12	6.22				6.22
TRICLBNZ,124	5.90				5.90
BENZIDINE	5.56				5.56
ACRYLAMIDE	4.40				4.40
MALEIC ANHYD	4.00				4.00
DINITROPH,24	3.47				3.47
PCP	3.06				3.06
PENTCLNITBEN	1.86				1.86
NITROSODIMET	1.78				1.78
HEXAACL-1,3-C	1.63				1.63
DIMETHOXY,33	1.54				1.54
TRIFLURALIN	1.45				1.45
ETH ACRYLATE	1.42				1.42
PCDD	0.35	1.03			1.38
ANISIDINE,O-	1.27				1.27
TRICLPHN,245	1.24				1.24
NITROSOMORPH	1.22				1.22
NITRBIPHEN,4	0.77				0.77
ACETAMIDE		0.71			0.71
HEXCLBENZENE		0.54			0.54
TCDF,2378	0.37	0.15			0.52
AMINOBIPHE,4	0.42				0.42
BENZ(BK)FL		0.22			0.22
NITROBENZ	0.21				0.21
PCBS	0.03				0.03
TCDD,2378	0.0008	0.0027			0.00
	109467132.35	67465665.85	69532429.09	26964155.99	273429383.28

RAPIDS Emissions Inventory Data

Appendix A-2 RAPIDS County Summary

Table A-2

Appendix A -**RAPIDS INVENTORY - INDIANA SUMMARY (SORTED BY COUNTY)****1999 Point + Area/1998 Mobile**

County	Point LBS	Area LBS	Onroad LBS	Nonroad LBS	Total LBS
MARION	4,433,056	8,795,210	11,122,041	2,641,961	26,992,269
LAKE	5,130,776	3,576,526	3,565,380	1,354,019	13,626,701
ELKHART	6,232,718	3,881,209	1,979,452	1,166,148	13,259,526
SPENCER	9,987,267	223,254	302,395	170,815	10,683,732
ALLEN	1,498,785	4,118,408	3,760,857	1,279,956	10,658,006
GIBSON	7,622,609	320,928	437,643	115,313	8,496,494
WARRICK	6,049,941	404,328	530,797	104,774	7,089,841
TIPPECANOE	3,597,034	1,574,009	1,491,366	406,440	7,068,850
ST. JOSEPH	582,070	2,913,479	2,640,636	898,552	7,034,737
PIKE	6,442,586	106,885	177,178	39,664	6,766,313
JEFFERSON	5,122,771	266,592	319,383	77,176	5,785,922
JASPER	4,670,462	497,429	496,543	94,896	5,759,329
LAPORTE	2,129,293	1,568,849	1,472,680	337,695	5,508,517
KOSCIUSKO	1,601,033	856,969	757,370	2,288,439	5,503,811
VIGO	2,269,994	1,255,090	1,355,735	287,048	5,167,867
VANDERBURGH	678,911	1,785,098	1,798,057	541,511	4,803,578
HAMILTON	367,912	1,445,359	1,759,294	973,360	4,545,926
DELAWARE	277,000	1,390,740	1,728,407	1,132,404	4,528,551
VERMILLION	3,869,413	221,657	266,747	46,815	4,404,633
PORTER	1,524,016	1,012,562	1,237,973	562,101	4,336,652
JOHNSON	1,050,415	1,068,306	907,418	1,085,866	4,112,005
SULLIVAN	3,507,923	206,560	258,449	68,425	4,041,356
DEARBORN	2,958,062	345,782	468,590	100,710	3,873,144
MADISON	297,636	1,505,954	1,650,714	371,338	3,825,642
POSEY	2,888,340	209,748	395,690	111,481	3,605,259
DUBOIS	1,071,274	867,735	505,927	997,559	3,442,495
WAYNE	838,656	1,206,819	1,168,336	129,252	3,343,062
FLOYD	1,526,832	952,070	575,003	210,974	3,264,879
MONROE	227,329	1,131,952	1,037,751	780,002	3,177,035
ADAMS	2,212,206	542,223	296,080	105,680	3,156,189
MARSHALL	1,595,479	623,262	644,273	159,353	3,022,368
BARTHOLOMEW	639,561	1,202,940	837,616	230,307	2,910,424
DEKALB	1,470,517	722,146	496,914	124,247	2,813,824
CLARK	464,120	1,041,832	904,104	317,455	2,727,510
LAGRANGE	177,229	574,113	484,874	1,380,377	2,616,593
MORGAN	1,187,721	523,957	735,315	160,053	2,607,046
GRANT	328,358	931,814	932,535	146,189	2,338,898
SHELBY	973,127	523,737	604,740	146,154	2,247,758
HOWARD	146,588	753,959	985,116	213,398	2,099,061
HENDRICKS	19,918	770,583	975,117	309,745	2,075,362
HANCOCK	154,729	499,466	918,513	184,297	1,757,005
MONTGOMERY	446,553	602,644	557,995	116,493	1,723,685
CASS	695,259	398,148	447,485	153,646	1,694,539
JACKSON	194,889	663,504	636,188	194,736	1,689,318
NOBLE	324,786	709,066	511,795	140,641	1,686,289
HUNTINGTON	518,449	447,383	562,676	134,890	1,663,398
WABASH	658,518	409,558	453,138	101,119	1,622,333
CLINTON	725,542	305,042	472,886	93,364	1,596,834
BOONE	32,042	434,758	795,157	261,661	1,523,618
WHITE	312,753	370,814	439,427	387,634	1,510,627

County	Point LBS	Area LBS	Onroad LBS	Nonroad LBS	Total LBS
KNOX	329,220	455,784	479,511	196,112	1,460,628
HENRY	101,373	502,926	690,531	139,033	1,433,864
STEUBEN	47,128	582,906	587,600	116,599	1,334,232
HARRISON	379,637	318,094	416,660	119,766	1,234,156
LAWRENCE	56,475	417,340	440,602	279,380	1,193,796
MIAMI	260,793	369,919	367,258	104,092	1,102,062
RANDOLPH	401,469	272,246	323,609	86,176	1,083,500
PUTNAM	130,995	301,329	550,957	86,821	1,070,102
RIPLEY	346,623	262,436	297,260	104,355	1,010,674
JENNINGS	46,772	559,186	282,831	51,915	940,703
CLAY	150,668	285,687	396,751	77,102	910,208
WHITLEY	19,433	371,004	422,955	94,258	907,650
FAYETTE	263,587	289,916	269,641	46,916	870,060
GREENE	14,793	294,019	390,268	92,877	791,957
DECATUR	5,531	263,000	397,238	93,663	759,432
FULTON	64,910	325,451	267,752	66,241	724,354
FOUNTAIN	259,973	166,612	215,456	68,550	710,590
WELLS	44,075	278,563	302,457	84,659	709,753
JAY	39,017	301,863	272,606	74,733	688,218
PERRY	129,754	215,898	224,836	116,160	686,649
ORANGE	194,815	268,263	167,533	52,058	682,670
WASHINGTON	30,603	234,187	289,569	128,191	682,551
DAVIESS	6,013	306,228	268,112	88,212	668,566
SCOTT	48,820	216,547	283,393	43,148	591,908
TIPTON	9,635	259,026	259,301	59,341	587,302
CARROLL	90,766	174,108	243,088	74,144	582,106
STARKE	1	301,075	216,957	59,317	577,350
NEWTON	114,947	192,634	192,477	59,519	559,577
RUSH	3,467	243,353	243,291	68,302	558,413
BROWN		177,668	129,893	214,724	522,285
PULASKI	92,460	165,568	181,167	62,315	501,510
BENTON		238,629	160,681	64,564	463,874
BLACKFORD	40,058	198,048	162,075	35,840	436,021
PARKE	217	148,852	230,183	55,094	434,346
FRANKLIN		158,233	227,928	47,550	433,712
OWEN		178,035	173,596	72,470	424,101
CRAWFORD		126,713	178,531	102,824	408,068
WARREN	1,014	87,812	158,601	47,732	295,159
MARTIN	44,827	93,887	106,312	33,103	278,129
SWITZERLAND	38,469	69,889	80,664	20,087	209,109
UNION		94,033	75,984	27,129	197,146
OHIO		38,374	46,557	12,951	97,883
TOTAL	105,540,804	67,565,800	69,532,429	26,964,156	269,603,190

RAPIDS Emissions Inventory Data

Appendix A-3 RAPIDS SIC Summary

Table A-3

Appendix A -**HAP Emissions by 4 Digit SIC Code - 1999 RAPIDS Inventory**

SIC Code	Description	Total LBS
4911	Electrical Services	58,323,784
2075	Soy Bean Oil Mills	4,117,465
3089	Plastics Products, NEC	3,754,007
3086	Plastics Foam Products	2,731,731
3334	Primary Production of Aluminum	2,426,593
3312	Steel Works, Blast Furnaces (including Coke Ovens) and Rolling Mills	2,262,836
3711	Motor Vehicles and Passenger Car Bodies	2,003,695
2821	Plastics Materials, Synthetic Resins and Nonvulcanizable Elastomers	1,801,468
2671	Packaging Paper and Plastics Film, Coated and Laminated	1,293,210
3069	Fabricated Rubber Products, NEC	1,288,341
3568	Mechanical Power Transmission Equipment, NEC	1,273,275
3995	Burial Caskets	1,190,385
3714	Motor Vehicle Parts and Accessories	942,924
2434	Wood Kitchen Cabinets	927,207
3088	Plastics Plumbing Fixtures	921,740
3321	Gray and Ductile Iron Foundries	888,850
2833	Medicinal Chemicals and Botanical Products	886,170
3296	Mineral Wool	856,763
3061	Molded, Extruded and Lathe-Cut Mechanical Rubber Goods	830,761
3479	Coating, Engraving and Allied Services, NEC	799,223
3357	Drawing and Insulating of Nonferrous Waste	760,416
2754	Commercial Printing, Gravure	743,123
3715	Truck Trailers	659,429
3732	Boat Building and Repairing	635,825
3411	Metal Cans	625,564
3799	Transportation Equipment, NEC	586,046
3792	Travel Trailers and Campers	583,908
3713	Truck and Bus Bodies	566,096
2834	Pharmaceutical Preparations	553,679
3325	Steel Foundries, NEC	543,749
3716	Motor Homes	536,948
8062	Hospitals NEC	512,852
3999	Manufacturing Industries, NEC	472,754
3499	Fabricated Metal Products, NEC	396,556
3087	Custom Compounding of Purchases Plastics Resins	384,514
2521	Wood Office Furniture	363,803
3444	Sheet Metal Work	356,409
2511	Wood Household Furniture, Except Upholstered	352,312
3452	Bolts, Nuts, Screws, Rivets and Washers	348,882
2631	Paperboard Mills	329,348
8221	Colleges, Universities and Professional Schools	327,509
2851	Paints, Varnishes, Lacquers, Enamels and Allied Products	294,957
2911	Petroleum Refining	286,984
3519	Internal Combustion Engines, NEC	286,837
2046	Wet Corn Milling	269,129
3647	Vehicular Lighting Equipment	261,302
3441	Fabricated Structural Metal	247,753
2041	Flour and Other Grain Mill Products	243,750

SIC Code	Description	Total LBS
3341	Secondary Smelting and Refining of Nonferrous Metals	238,322
2499	Wood Products, NEC	237,759
5171	Petroleum Bulk Stations and Terminals	215,808
4925	Mixed, Manufactured, or Liquified Petroleum Gas Production and/or Distribution	211,064
3491	Industrial Valves	195,476
3469	Metal Stampings, NEC	191,031
2951	Asphalt Paving Mixtures and Blocks	187,659
3931	Musical Instruments	173,111
3534	Elevators and Moving Stairways	171,094
2893	Printing Ink	167,671
3621	Motors and Generators	152,678
2672	Coated and Laminated Paper, NEC	142,239
2899	Chemicals and Chemical Preparations, NEC	139,476
3083	Laminated Plastics Plate, Sheet and Profile Shapes	134,334
3365	Aluminum Foundries	132,867
2869	Industrial Organic Chemicals	131,677
3442	Metal Doors, Sash, Frames, Molding and Trim	131,602
2541	Wood Office and Store Fixtures, Partitions, Shelving and Lockers	122,670
3354	Aluminum Extruded Products	121,680
3629	Electrical Industrial Apparatus, NEC	121,652
4953	Refuse Systems	112,701
9999	Nonclassifiable Establishments	106,085
3446	Architectural and Ornamental Metal Work	105,820
4961	Steam and Air Conditioning Supply	104,873
3231	Glass Products, Made of Purchased Glass	99,746
3353	Aluminum Sheet, Plate and Foil	96,183
2891	Adhesives and Sealants	96,017
3449	Miscellaneous Structural Metal Work	92,076
2519	Household Furniture, NEC	91,482
2451	Mobile Homes	90,980
3292	Asbestos Products	89,827
3241	Cement, Hydraulic	85,051
3731	Ship Building and Repairing	81,494
3861	Photographic Equipment and Supplies	81,072
3465	Automotive Stampings	80,265
2077	Animal and Marine Fats and Oils	79,970
1221	Bituminous Coal and Lignite Surface Mining	75,120
2517	Wood Television, Radio, Phonograph and Sewing Machine Cabinets	73,020
3466	Crowns and Closures	68,300
3632	Household Refrigerators and Home and Farm Freezers	66,050
3211	Flat Glass	62,240
3011	Tire and Inner Tubes	59,396
3537	Industrial Trucks, Tractors, Trailers and Stackers	57,331
2085	Distilled and Blended Liquors	57,013
2599	Furniture and Fixtures, NEC	50,666
3356	Rolling, Drawing and Extruding of Nonferrous Metals, Except Copper and Aluminum	49,639
3053	Gaskets, Packing and Sealing Devices	49,555
2759	Commercial Printing, NEC	49,374
9711	National Security	49,316
3079	Rubber and Plastic Products	46,263
3671	Electron Tubes	45,922
4922	Natural Gas Transmission	45,350
2655	Fiber Cans, Tubes, Drums and Similar Products	45,071
2512	Wood Household Furniture, Upholstered	45,034

SIC Code	Description	Total LBS
3679	Electronic Components, NEC	44,928
2431	Millwork	44,448
2491	Wood Preserving	44,174
3743	Railroad Equipment	43,442
3297	Nonclay Refractories	42,894
2514	Metal Household Furniture	42,504
2531	Public Building and Related Furniture	39,819
3052	Rubber and Plastics Hose and Belting	38,752
2522	Office Furniture, Except Wood	38,401
2752	Commercial Printing, Lithographic	38,214
3315	Steel Wiredrawing and Steel Nails and Spikes	38,086
3599	Industrial and Commercial Machinery and Equipment, NEC	36,460
3085	Plastics Bottles	35,550
3251	Brick and Structural Clay Tile	33,458
5169	Chemicals and Allied Products, NEC	32,291
3585	Air Conditioning and Warm Air Heating Equipment and Commercial and Indus	32,184
3316	Cold-Rolled Steel Sheet, Strip and Bars	31,617
3674	Semiconductors and Related Devices	31,085
2819	Industrial Inorganic Chemicals, NEC	30,756
3496	Miscellaneous Fabricated Wire Products	28,556
3612	Power, Distribution and Specialty Transformers	27,922
2679	Converted Paper and Paperboard Products	27,644
4226	Special Warehousing and Storage, NEC	25,863
3081	Unsupported Plastics Film and Sheet	25,692
4613	Refined Petroleum Pipelines	24,333
3443	Fabricated Plate Work (Boiler Shops)	23,865
3531	Construction Machinery and Equipment	22,500
2435	Hardwood Veneer and Plywood	20,514
3471	Electroplating, Plating, Polishing, Anodizing and Coloring	20,204
9511	Air, Water Resource and Solid Waste Management	19,937
4789	Transportation Services, NEC	19,836
2796	Platemaking and Related Services	19,772
2096	Potato Chips, Corn Chips and Similar Snacks	18,705
7216	Dry Cleaning Plants, Except Rug Cleaning	18,304
4011	Railroads, Line-Haul Operating	18,160
3586	Measuring and Dispensing Pumps	17,618
3569	General Industrial Machinery and Equipment, NEC	16,860
7389	Business Services, NEC	16,535
3433	Heating Equipment, Except Electric and Warm Air Furnaces	15,813
3351	Rolling, Drawing and Extruding of Copper	15,730
4741	Rental of Railroad Cars	15,192
3448	Prefabricated Metal Buildings and Components	14,476
3451	Screw Machine Products	14,000
3532	Mining Machinery and Equipment, Except Oil and Gas Field Machinery and Eq	13,958
2732	Book Printing	13,684
3728	Aircraft Parts and Auxiliary Equipment, NEC	13,522
3949	Sporting and Athletic Goods, NEC	13,413
3613	Switchgear and Switchboard Apparatus	12,367
2841	Soap and Other Detergents, Except Specialty Cleaners	12,313
3363	Aluminum Die-Castings	11,487
3564	Industrial and Commercial Fans and Blowers and Air Purification Equipment	11,480
1521	General Contractors - Single Family Houses	11,468
3724	Aircraft Engines and Engine Parts	10,111
4952	Sewerage Systems	9,886

SIC Code	Description	Total LBS
3493	Steel Springs, Except Wire	9,732
3562	Ball and Roller Bearings	9,630
3643	Current-Carrying Wiring Devices	9,357
3462	Iron and Steel Forgings	8,767
3432	Plumbing Fixture Fittings and Trim	7,859
8999	Service, NEC	7,721
1321	Natural Gas Liquids	7,603
3567	Industrial Process Furnaces and Ovens	6,960
9223	Correctional Institutions	6,923
7218	Industrial Launderers	6,069
2842	Specialty Cleaning, Polishing and Sanitation Preparations	5,753
3672	Printed Circuit Boards	5,508
2791	Typesetting	5,480
2731	Books; Publishing or Publishing and Printing	5,170
8069	Specialty Hospitals, Except Psychiatric	4,943
3369	Nonferrous Foundries, Except Aluminum and Copper	4,900
3523	Farm Machinery and Equipment	4,891
3259	Structural Clay Products, NEC	4,827
3221	Glass Containers	4,642
3648	Lighting Equipment, NEC	4,550
3144	Women's Footwear, Except Athletic	4,413
7641	Reupholstery and Furniture Repair	4,400
3996	Linoleum, Asphalted Felt Base and Other Hard Surface Floor Coverings, NEC	4,280
3295	Minerals and Earths, Ground or Otherwise Treated	4,038
3082	Unsupported Plastics Profile Shapes	3,660
2999	Products of Petroleum and Coal, NEC	3,509
8063	Psychiatric Hospitals	3,463
2835	In Vitro and In Vivo Diagnostic Substances	3,361
2099	Food Preparations, NEC	3,114
3842	Orthopedic, Prosthetic and Surgical Appliances and Supplies	2,995
2875	Fertilizers, Mixing Only	2,820
2011	Meat Packing Plants	2,759
2992	Lubricating Oils and Greases	2,459
3324	Steel Investment Foundries	2,422
5541	Gasoline Service Stations	1,884
5093	Scrap and Waste Materials	1,803
3429	Hardware, NEC	1,790
2673	Plastics, Foil and Coated Paper Bags	1,710
3269	Pottery Products, NEC	1,405
3691	Storage Batteries	1,298
1442	Construction Sand and Gravel	1,005
3399	Primary Metal Products, NEC	885
3544	Special Dies and Tools, Ore Sets, Jigs and Fixtures and Industrial Molds	795
2653	Corrugated and Solid Fiber Boxes	793
3483	Ammunition, Except for Small Arms	755
3651	Household Audio and Video Equipment	750
3535	Conveyors and Conveying Equipment	658
3561	Pumps and Pumping Equipment	610
3275	Gypsum Products	566
3566	Speed Changers, Industrial High-Speed Drives and Gears	552
3541	Machine Tools, Metal Cutting Types	519
2051	Bread and Other Bakery Products, Except Cookies and Crackers	513
3362	Nonferrous Foundry (castings) NEC	510
3694	Electrical Equipment for Internal Combustion Engines	510

SIC Code	Description	Total LBS
3398	Metal Heat Treating	509
1611	Highway and Street Construction, Except Elevated Highways	437
4612	Crude Petroleum Pipelines	434
3492	Fluid Power Valves and Hose Fittings	417
3281	Cut Stone and Stone Products	341
3273	Ready-Mixed Concrete	308
2813	Industrial Gases	299
3498	Fabricated Pipe and Pipe Fittings	290
2421	Sawmills and Planing Mills, General	287
2048	Prepared Feeds and Feed Ingredients for Animals and Fouls, Except Dogs and Cats	277
2844	Perfumes, Cosmetics and Other Toilet Preparations	271
4214	Local Trucking With Storage	268
3511	Steam, Gas and Hydraulic Turbines, and Turbine Generator Set Units	260
3317	Steel Pipe and Tubes	255
3678	Electronic Connectors	255
2426	Hardwood Dimension and Flooring Mills	236
3841	Surgical and Medical Instruments and Apparatus	235
3952	Lead Pencils, Crayons and Artists' Materials	188
2711	Newspapers; Publishing or Publishing and Printing	180
4924	Natural Gas Distribution	130
7694	Armature Rewinding Shops	119
2621	Paper Mills	89
3553	Woodworking Machinery	87
4581	Airports, Flying Fields and Airport Terminal Services	59
3255	Clay Refractories	59
2023	Dry, Condensed and Evaporated Dairy Products	59
2879	Pesticides and Agricultural Chemicals, NEC	50
3644	Noncurrent-Carrying Wiring Devices	35
2033	Canned Fruits, Vegetables, Preserves, Jams and Jellies	34
8051	Skilled Nursing Care Facilities	32
8734	Testing Laboratories	32
2079	Shortening, Table Oils, Margarine and Other Edible Fats and Oils, NEC	25
4513	Air Courier Services	21
3463	Nonferrous Forgings	20
1422	Crushed and Broken Limestone	20
2874	Phosphatic Fertilizers	19
2032	Canned Specialties	17
2836	Biological Products, Except Diagnostic Substances	10
7331	Direct Mail Advertising Services	9
9199	General Government, NEC	8
3652	Phonograph Records and Prerecorded Audio Tapes and Disks	8
0115	Corn Farm	8
8211	Elementary and Secondary Schools	7
3592	Carburetors, Pistons, Piston Rings and Valves	5
4931	Electric and Other Services Combined	4
5153	Grain and Field Beans	2
		109,404,820

RAPIDS Emissions Inventory Data

Appendix A-4 33 HAPS Alphabetically

Table A-4

Appendix A -
RAPIDS DATA FOR 33 INDIANA HAP OF CONCERN
1999 Point + Area/1998 Mobile (Sorted Alphabetically)

HAP	POINT	% POINT	AREA	% AREA	ONROAD	% ONROAD	NONROAD	% NONROAD	TOTAL
ACROLEIN	20842.87	3%	106098.91	16%	235548.33	35%	314935.41	46%	677425.53
ARSENIC	30958.51	93%	2400.99	7%	10.57	0%	78.99	0%	33449.06
BENZENE	433441.24	4%	1761301.51	17%	5708833.47	55%	2527472.38	24%	10431048.59
CARBON DISUL	94401.22	99%	598.12	1%					94999.34
CHROMIUM	80372.98	97%	1108.36	1%	205.44	0%	1116.79	1%	82803.56
CHROMIUM VI	4318.73	98%	67.28	2%					4386.01
COBALT	10563.78	99%	63.10	1%					10626.88
COKE OVEN GS	569870.17	100%							569870.17
ETHYLBENZENE	691820.41	10%	913178.37	13%	3651761.93	53%	1669743.87	24%	6926504.58
FORMALDEHYDE	352417.45	4%	315181.68	3%	5065514.88	52%	3955398.15	41%	9688512.17
HCL	54378891.01	100%	210336.18	0%					54589227.19
HEXANE	4962299.05	49%	4132407.65	41%			1070630.07	11%	10165336.77
HF	6845451.24	100%	8.39	0%					6845459.63
LEAD	161474.78	80%	4967.01	2%	12767.66	6%	22915.75	11%	202125.20
LEAD OXIDE	102.20	100%							102.20
MANGANESE	286005.66	99%	1549.75	1%	344.15	0%	1360.51	0%	289260.06
MERCURY	7801.78	88%	438.51	5%	305.01	3%	337.53	4%	8882.83
METHANOL	3274389.73	46%	3849269.46	54%					7123659.19
METHYL CHLOR	53463.08	50%	53522.01	50%					106985.09
METHYLENE CL	4518756.95	78%	1254025.71	22%					5772782.66
NICKEL	59507.13	86%	4271.18	6%	272.70	0%	5537.82	8%	69588.83
QUINOLINE	4087.26	100%							4087.26
STYRENE	6012917.40	86%	2308.27	0%	842318.51	12%	108753.24	2%	6966297.43
TCE,111	34628.29	1%	5527443.84	99%					5562072.13
TOLUENE	6854791.60	12%	17112252.67	30%	25182832.08	45%	7279050.72	13%	56428927.08
TOLUENE24DII	6073.02	100%							6073.02
TRICLORETHY	1030083.13	26%	2859840.26	74%					3889923.39
TRIETHAMINE	909785.05	99%	4986.12	1%					914771.17
VINLIDENE CL	1.42	0%	2784.14	100%					2785.56

HAP	POINT	% POINT	AREA	% AREA	ONROAD	% ONROAD	NONROAD	% NONROAD	TOTAL
VINYL CHLOR	3467.49	36%	6259.32	64%					9726.81
XYLENE,M	3444.33	0%	36972.04	1%	7351110.43	99%			7391526.80
XYLENE,O	1524.04	0%	99289.45	3%	3866581.33	97%	3320.01	0%	3970714.84
XYLENE,P	983.10	3%	36972.04	97%					37955.14
XYLENES ISO	5775732.27	14%	14568200.80	35%	14264978.85	35%	6553717.65	16%	41162629.56
ACENAPHTHEN*	29.40	1%	3566.31	85%			580.24	14%	4175.95
ACENAPHTHYL*	20.77	0%	75527.50	97%			2348.42	3%	77896.69
ANTHRACENE*	48731.68	89%	4990.12	9%	11.54	0%	1037.25	2%	54770.59
BENZ(A)ANTHR*	15860.37	65%	7778.46	32%	99.16	0%	707.82	3%	24445.81
BENZ(BK)FL*			0.22	100%					0.22
BENZ(GHI)PE*	1.62	0%	1425.64	69%	207.44	10%	421.24	20%	2055.94
BENZO(A)PYRE*	12765.08	87%	1581.01	11%	80.13	1%	276.38	2%	14702.59
BENZO(B)FLUO*	0.34	0%	2137.92	86%	112.57	5%	232.02	9%	2482.84
BENZO(K)FLUO*	0.04	0%	712.90	70%	85.92	8%	226.45	22%	1025.32
CHRYSENE*	15245.21	72%	4929.88	23%	919.04	4%	186.59	1%	21280.72
DIBENZAHAN*	0.10	0%	1617.36	99%	13.85	1%	2.00	0%	1633.31
FLUORANTHENE*	45374.77	83%	7839.23	14%	116.24	0%	1169.25	2%	54499.50
FLUORENE*	58.32	1%	8551.91	82%			1759.56	17%	10369.78
INDN(123CDPY*	3.14	0%	7125.34	98%	17.78	0%	103.95	1%	7250.21
NAPHTHALENE*	331865.93	21%	668605.80	42%	554205.04	34%	56388.76	4%	1611065.53
PCBS*	0.03	100%							0.03
PCDD*	0.35	25%	1.03	75%					1.38
PCDF*	1.13	17%	5.62	83%					6.75
PHENANTHRENE*	139343.48	82%	27796.53	16%	66.89	0%	2732.16	2%	169939.05
PYRENE*	21.61	0%	8552.64	82%	149.78	1%	1644.47	16%	10368.50
TCDF,2378*	0.37	71%	0.15	29%					0.52
TCDD,2378*	0.0008	23%	0.0027	77%					0.0035

* INCLUDED IN THE POM CATEGORY

PBTS ON THE LIST INCLUDE METALS (COBALT, CHROMIUM, LEAD, MERCURY, MANGANESE, NICKEL) AND POMS AND DIOXINS/FURANS

RAPIDS Emissions Inventory Data

Appendix A-5 33 HAPS Point

Table A-5

APPENDIX A -
RAPIDS DATA FOR 33 INDIANA HAP OF CONCERN
1999 Point + Area/1998 Mobile (Sorted Point)

HAP	POINT	% POINT	AREA	% AREA	ONROAD	% ONROAD	NONROAD	% NONROAD	TOTAL
COKE OVEN GS	569870.17	100%							569870.17
LEAD OXIDE	102.20	100%							102.20
QUINOLINE	4087.26	100%							4087.26
TOLUENE24DII	6073.02	100%							6073.02
PCBS*	0.03	100%							0.03
HF	6845451.24	100%	8.39	0%					6845459.63
HCL	54378891.01	100%	210336.18	0%					54589227.19
TRIETHAMINE	909785.05	99%	4986.12	1%					914771.17
COBALT	10563.78	99%	63.10	1%					10626.88
CARBON DISUL	94401.22	99%	598.12	1%					94999.34
MANGANESE	286005.66	99%	1549.75	1%	344.15	0%	1360.51	0%	289260.06
CHROMIUM VI	4318.73	98%	67.28	2%					4386.01
CHROMIUM	80372.98	97%	1108.36	1%	205.44	0%	1116.79	1%	82803.56
ARSENIC	30958.51	93%	2400.99	7%	10.57	0%	78.99	0%	33449.06
ANTHRACENE*	48731.68	89%	4990.12	9%	11.54	0%	1037.25	2%	54770.59
MERCURY	7801.78	88%	438.51	5%	305.01	3%	337.53	4%	8882.83
BENZO(A)PYRE*	12765.08	87%	1581.01	11%	80.13	1%	276.38	2%	14702.59
STYRENE	6012917.40	86%	2308.27	0%	842318.51	12%	108753.24	2%	6966297.43
NICKEL	59507.13	86%	4271.18	6%	272.70	0%	5537.82	8%	69588.83
FLUORANTHENE*	45374.77	83%	7839.23	14%	116.24	0%	1169.25	2%	54499.50
PHENANTHRENE*	139343.48	82%	27796.53	16%	66.89	0%	2732.16	2%	169939.05
LEAD	161474.78	80%	4967.01	2%	12767.66	6%	22915.75	11%	202125.20
METHYLENE CL	4518756.95	78%	1254025.71	22%					5772782.66
CHRYSENE*	15245.21	72%	4929.88	23%	919.04	4%	186.59	1%	21280.72
TCDF,2378*	0.37	71%	0.15	29%					0.52
BENZ(A)ANTHR*	15860.37	65%	7778.46	32%	99.16	0%	707.82	3%	24445.81
METHYL CHLOR	53463.08	50%	53522.01	50%					106985.09
HEXANE	4962299.05	49%	4132407.65	41%			1070630.07	11%	10165336.77
METHANOL	3274389.73	46%	3849269.46	54%					7123659.19

HAP	POINT	% POINT	AREA	% AREA	ONROAD	% ONROAD	NONROAD	% NONROAD	TOTAL
VINYL CHLOR	3467.49	36%	6259.32	64%					9726.81
TRICLORETHY	1030083.13	26%	2859840.26	74%					3889923.39
PCDD*	0.35	25%	1.03	75%					1.38
TCDD,2378*	0.0008	23%	0.0027	77%					0.0035
NAPHTHALENE*	331865.93	21%	668605.80	42%	554205.04	34%	56388.76	4%	1611065.53
PCDF*	1.13	17%	5.62	83%					6.75
XYLENES ISO	5775732.27	14%	14568200.80	35%	14264978.85	35%	6553717.65	16%	41162629.56
TOLUENE	6854791.60	12%	17112252.67	30%	25182832.08	45%	7279050.72	13%	56428927.08
ETHYLBENZENE	691820.41	10%	913178.37	13%	3651761.93	53%	1669743.87	24%	6926504.58
BENZENE	433441.24	4%	1761301.51	17%	5708833.47	55%	2527472.38	24%	10431048.59
FORMALDEHYDE	352417.45	4%	315181.68	3%	5065514.88	52%	3955398.15	41%	9688512.17
ACROLEIN	20842.87	3%	106098.91	16%	235548.33	35%	314935.41	46%	677425.53
XYLENE,P	983.10	3%	36972.04	97%					37955.14
ACENAPHTHEN*	29.40	1%	3566.31	85%			580.24	14%	4175.95
TCE,111	34628.29	1%	5527443.84	99%					5562072.13
FLUORENE*	58.32	1%	8551.91	82%			1759.56	17%	10369.78
PYRENE*	21.61	0%	8552.64	82%	149.78	1%	1644.47	16%	10368.50
BENZ(GHI)PE*	1.62	0%	1425.64	69%	207.44	10%	421.24	20%	2055.94
VINLIDENE CL	1.42	0%	2784.14	100%					2785.56
XYLENE,M	3444.33	0%	36972.04	1%	7351110.43	99%			7391526.80
INDN(123CDPY*)	3.14	0%	7125.34	98%	17.78	0%	103.95	1%	7250.21
XYLENE,O	1524.04	0%	99289.45	3%	3866581.33	97%	3320.01	0%	3970714.84
ACENAPHTHYL*	20.77	0%	75527.50	97%			2348.42	3%	77896.69
BENZO(B)FLUO*	0.34	0%	2137.92	86%	112.57	5%	232.02	9%	2482.84
DIBENZAHAN*	0.10	0%	1617.36	99%	13.85	1%	2.00	0%	1633.31
BENZO(K)FLUO*	0.04	0%	712.90	70%	85.92	8%	226.45	22%	1025.32
BENZ(BK)FL*			0.22	100%					0.22

* INCLUDED IN THE POM CATEGORY

PBTS ON THE LIST INCLUDE METALS (COBALT, CHROMIUM, LEAD, MERCURY, MANGANESE, NICKEL) AND POMS AND DIOXINS/FURANS

RAPIDS Emissions Inventory Data

Appendix A-6 33 HAPS Area

Table A-6

APPENDIX A -
RAPIDS DATA FOR 34 INDIANA HAP OF CONCERN
1999 Point + Area/1998 Mobile (Sorted Area)

HAP	POINT	% POINT	AREA	% AREA	ONROAD	% ONROAD	NONROAD	% NONROAD	TOTAL
BENZ(BK)FL*			0.22	100%					0.22
VINLIDENE CL	1.42	0%	2784.14	100%					2785.56
TCE,111	34628.29	1%	5527443.84	99%					5562072.13
DIBENZAHAN*	0.10	0%	1617.36	99%	13.85	1%	2.00	0%	1633.31
INDN(123CDPY*	3.14	0%	7125.34	98%	17.78	0%	103.95	1%	7250.21
XYLENE,P	983.10	3%	36972.04	97%					37955.14
ACENAPHTHYL*	20.77	0%	75527.50	97%			2348.42	3%	77896.69
BENZO(B)FLUO*	0.34	0%	2137.92	86%	112.57	5%	232.02	9%	2482.84
ACENAPHTHEN*	29.40	1%	3566.31	85%			580.24	14%	4175.95
PCDF*	1.13	17%	5.62	83%					6.75
PYRENE*	21.61	0%	8552.64	82%	149.78	1%	1644.47	16%	10368.50
FLUORENE*	58.32	1%	8551.91	82%			1759.56	17%	10369.78
TCDD,2378*	0.0008	23%	0.0027	77%					0.0035
PCDD*	0.35	25%	1.03	75%					1.38
TRICLORETHY	1030083.13	26%	2859840.26	74%					3889923.39
BENZO(K)FLUO*	0.04	0%	712.90	70%	85.92	8%	226.45	22%	1025.32
BENZ(GHI)PE*	1.62	0%	1425.64	69%	207.44	10%	421.24	20%	2055.94
VINYL CHLOR	3467.49	36%	6259.32	64%					9726.81
METHANOL	3274389.73	46%	3849269.46	54%					7123659.19
METHYL CHLOR	53463.08	50%	53522.01	50%					106985.09
NAPHTHALENE*	331865.93	21%	668605.80	42%	554205.04	34%	56388.76	4%	1611065.53
HEXANE	4962299.05	49%	4132407.65	41%			1070630.07	11%	10165336.77
XYLENES ISO	5775732.27	14%	14568200.80	35%	14264978.85	35%	6553717.65	16%	41162629.56
BENZ(A)ANTHR*	15860.37	65%	7778.46	32%	99.16	0%	707.82	3%	24445.81
TOLUENE	6854791.60	12%	17112252.67	30%	25182832.08	45%	7279050.72	13%	56428927.08
TCDF,2378*	0.37	71%	0.15	29%					0.52
CHRYSENE*	15245.21	72%	4929.88	23%	919.04	4%	186.59	1%	21280.72
METHYLENE CL	4518756.95	78%	1254025.71	22%					5772782.66
BENZENE	433441.24	4%	1761301.51	17%	5708833.47	55%	2527472.38	24%	10431048.59

HAP	POINT	% POINT	AREA	% AREA	ONROAD	% ONROAD	NONROAD	% NONROAD	TOTAL
PHENANTHRENE*	139343.48	82%	27796.53	16%	66.89	0%	2732.16	2%	169939.05
ACROLEIN	20842.87	3%	106098.91	16%	235548.33	35%	314935.41	46%	677425.53
FLUORANTHENE*	45374.77	83%	7839.23	14%	116.24	0%	1169.25	2%	54499.50
ETHYLBENZENE	691820.41	10%	913178.37	13%	3651761.93	53%	1669743.87	24%	6926504.58
BENZO(A)PYRE*	12765.08	87%	1581.01	11%	80.13	1%	276.38	2%	14702.59
ANTHRACENE*	48731.68	89%	4990.12	9%	11.54	0%	1037.25	2%	54770.59
ARSENIC	30958.51	93%	2400.99	7%	10.57	0%	78.99	0%	33449.06
NICKEL	59507.13	86%	4271.18	6%	272.70	0%	5537.82	8%	69588.83
MERCURY	7801.78	88%	438.51	5%	305.01	3%	337.53	4%	8882.83
FORMALDEHYDE	352417.45	4%	315181.68	3%	5065514.88	52%	3955398.15	41%	9688512.17
XYLENE,O	1524.04	0%	99289.45	3%	3866581.33	97%	3320.01	0%	3970714.84
LEAD	161474.78	80%	4967.01	2%	12767.66	6%	22915.75	11%	202125.20
CHROMIUM VI	4318.73	98%	67.28	2%					4386.01
CHROMIUM	80372.98	97%	1108.36	1%	205.44	0%	1116.79	1%	82803.56
CARBON DISUL	94401.22	99%	598.12	1%					94999.34
COBALT	10563.78	99%	63.10	1%					10626.88
TRIETHAMINE	909785.05	99%	4986.12	1%					914771.17
MANGANESE	286005.66	99%	1549.75	1%	344.15	0%	1360.51	0%	289260.06
XYLENE,M	3444.33	0%	36972.04	1%	7351110.43	99%			7391526.80
HCL	54378891.01	100%	210336.18	0%					54589227.19
STYRENE	6012917.40	86%	2308.27	0%	842318.51	12%	108753.24	2%	6966297.43
HF	6845451.24	100%	8.39	0%					6845459.63
COKE OVEN GS	569870.17	100%							569870.17
LEAD OXIDE	102.20	100%							102.20
QUINOLINE	4087.26	100%							4087.26
TOLUENE24DII	6073.02	100%							6073.02
PCBS*	0.03	100%							0.03

* INCLUDED IN THE POM CATEGORY

PBTS ON THE LIST INCLUDE METALS (COBALT, CHROMIUM, LEAD, MERCURY, MANGANESE, NICKEL) AND POMS AND DIOXINS/FURANS

RAPIDS Emissions Inventory Data

Appendix A-7 33 HAPS Onroad

Table A-7

APPENDIX A -
RAPIDS DATA FOR 33 INDIANA HAP OF CONCERN
1999 Point + Area/1998 Mobile (Sorted Onroad)

HAP	POINT	% POINT	AREA	% AREA	ONROAD	% ONROAD	NONROAD	% NONROAD	TOTAL
XYLENE,M	3444.33	0%	36972.04	1%	7351110.43	99%			7391526.80
XYLENE,O	1524.04	0%	99289.45	3%	3866581.33	97%	3320.01	0%	3970714.84
BENZENE	433441.24	4%	1761301.51	17%	5708833.47	55%	2527472.38	24%	10431048.59
ETHYLBENZENE	691820.41	10%	913178.37	13%	3651761.93	53%	1669743.87	24%	6926504.58
FORMALDEHYDE	352417.45	4%	315181.68	3%	5065514.88	52%	3955398.15	41%	9688512.17
TOLUENE	6854791.60	12%	17112252.67	30%	25182832.08	45%	7279050.72	13%	56428927.08
ACROLEIN	20842.87	3%	106098.91	16%	235548.33	35%	314935.41	46%	677425.53
XYLENES ISO	5775732.27	14%	14568200.80	35%	14264978.85	35%	6553717.65	16%	41162629.56
NAPHTHALENE*	331865.93	21%	668605.80	42%	554205.04	34%	56388.76	4%	1611065.53
STYRENE	6012917.40	86%	2308.27	0%	842318.51	12%	108753.24	2%	6966297.43
BENZ(GHI)PE*	1.62	0%	1425.64	69%	207.44	10%	421.24	20%	2055.94
BENZO(K)FLUO*	0.04	0%	712.90	70%	85.92	8%	226.45	22%	1025.32
LEAD	161474.78	80%	4967.01	2%	12767.66	6%	22915.75	11%	202125.20
BENZO(B)FLUO*	0.34	0%	2137.92	86%	112.57	5%	232.02	9%	2482.84
CHRYSENE*	15245.21	72%	4929.88	23%	919.04	4%	186.59	1%	21280.72
MERCURY	7801.78	88%	438.51	5%	305.01	3%	337.53	4%	8882.83
PYRENE*	21.61	0%	8552.64	82%	149.78	1%	1644.47	16%	10368.50
DIBENZAHAN*	0.10	0%	1617.36	99%	13.85	1%	2.00	0%	1633.31
BENZO(A)PYRE*	12765.08	87%	1581.01	11%	80.13	1%	276.38	2%	14702.59
BENZ(A)ANTHR*	15860.37	65%	7778.46	32%	99.16	0%	707.82	3%	24445.81
NICKEL	59507.13	86%	4271.18	6%	272.70	0%	5537.82	8%	69588.83
CHROMIUM	80372.98	97%	1108.36	1%	205.44	0%	1116.79	1%	82803.56
INDN(123CDPY)*	3.14	0%	7125.34	98%	17.78	0%	103.95	1%	7250.21
FLUORANTHENE*	45374.77	83%	7839.23	14%	116.24	0%	1169.25	2%	54499.50
MANGANESE	286005.66	99%	1549.75	1%	344.15	0%	1360.51	0%	289260.06
PHENANTHRENE*	139343.48	82%	27796.53	16%	66.89	0%	2732.16	2%	169939.05
ARSENIC	30958.51	93%	2400.99	7%	10.57	0%	78.99	0%	33449.06
ANTHRACENE*	48731.68	89%	4990.12	9%	11.54	0%	1037.25	2%	54770.59
BENZ(BK)FL*			0.22	100%					0.22

HAP	POINT	% POINT	AREA	% AREA	ONROAD	% ONROAD	NONROAD	% NONROAD	TOTAL
VINLIDENE CL	1.42	0%	2784.14	100%					2785.56
TCE,111	34628.29	1%	5527443.84	99%					5562072.13
XYLENE,P	983.10	3%	36972.04	97%					37955.14
ACENAPHTHYL*	20.77	0%	75527.50	97%			2348.42	3%	77896.69
ACENAPHTHEN*	29.40	1%	3566.31	85%			580.24	14%	4175.95
PCDF*	1.13	17%	5.62	83%					6.75
FLUORENE*	58.32	1%	8551.91	82%			1759.56	17%	10369.78
TCDD,2378*	0.0008	23%	0.0027	77%					0.0035
PCDD*	0.35	25%	1.03	75%					1.38
TRICLORETHY	1030083.13	26%	2859840.26	74%					3889923.39
VINYL CHLOR	3467.49	36%	6259.32	64%					9726.81
METHANOL	3274389.73	46%	3849269.46	54%					7123659.19
METHYL CHLOR	53463.08	50%	53522.01	50%					106985.09
HEXANE	4962299.05	49%	4132407.65	41%			1070630.07	11%	10165336.77
TCDF,2378*	0.37	71%	0.15	29%					0.52
METHYLENE CL	4518756.95	78%	1254025.71	22%					5772782.66
CHROMIUM VI	4318.73	98%	67.28	2%					4386.01
CARBON DISUL	94401.22	99%	598.12	1%					94999.34
COBALT	10563.78	99%	63.10	1%					10626.88
TRIETHAMINE	909785.05	99%	4986.12	1%					914771.17
HCL	54378891.01	100%	210336.18	0%					54589227.19
HF	6845451.24	100%	8.39	0%					6845459.63
COKE OVEN GS	569870.17	100%							569870.17
LEAD OXIDE	102.20	100%							102.20
QUINOLINE	4087.26	100%							4087.26
TOLUENE24DII	6073.02	100%							6073.02
PCBS*	0.03	100%							0.03

* INCLUDED IN THE POM CATEGORY

PBTS ON THE LIST INCLUDE METALS (COBALT, CHROMIUM, LEAD, MERCURY, MANGANESE, NICKEL) AND POMS AND DIOXINS/FURANS

RAPIDS Emissions Inventory Data

Appendix A-8 33 HAPS Nonroad

Table A-8

APPENDIX A -
RAPIDS DATA FOR 33 INDIANA HAP OF CONCERN
1999 Point + Area/1998 Mobile (Sorted Nonroad)

HAP	POINT	% POINT	AREA	% AREA	ONROAD	% ONROAD	NONROAD	% NONROAD	TOTAL
ACROLEIN	20842.87	3%	106098.91	16%	235548.33	35%	314935.41	46%	677425.53
FORMALDEHYDE	352417.45	4%	315181.68	3%	5065514.88	52%	3955398.15	41%	9688512.17
BENZENE	433441.24	4%	1761301.51	17%	5708833.47	55%	2527472.38	24%	10431048.59
ETHYLBENZENE	691820.41	10%	913178.37	13%	3651761.93	53%	1669743.87	24%	6926504.58
BENZO(K)FLUO*	0.04	0%	712.90	70%	85.92	8%	226.45	22%	1025.32
BENZ(GHI)PE*	1.62	0%	1425.64	69%	207.44	10%	421.24	20%	2055.94
FLUORENE*	58.32	1%	8551.91	82%			1759.56	17%	10369.78
XYLENES ISO	5775732.27	14%	14568200.80	35%	14264978.85	35%	6553717.65	16%	41162629.56
PYRENE*	21.61	0%	8552.64	82%	149.78	1%	1644.47	16%	10368.50
ACENAPHTHEN*	29.40	1%	3566.31	85%			580.24	14%	4175.95
TOLUENE	6854791.60	12%	17112252.67	30%	25182832.08	45%	7279050.72	13%	56428927.08
LEAD	161474.78	80%	4967.01	2%	12767.66	6%	22915.75	11%	202125.20
HEXANE	4962299.05	49%	4132407.65	41%			1070630.07	11%	10165336.77
BENZO(B)FLUO*	0.34	0%	2137.92	86%	112.57	5%	232.02	9%	2482.84
NICKEL	59507.13	86%	4271.18	6%	272.70	0%	5537.82	8%	69588.83
MERCURY	7801.78	88%	438.51	5%	305.01	3%	337.53	4%	8882.83
NAPHTHALENE*	331865.93	21%	668605.80	42%	554205.04	34%	56388.76	4%	1611065.53
ACENAPHTHYL*	20.77	0%	75527.50	97%			2348.42	3%	77896.69
BENZ(A)ANTHR*	15860.37	65%	7778.46	32%	99.16	0%	707.82	3%	24445.81
FLUORANTHENE*	45374.77	83%	7839.23	14%	116.24	0%	1169.25	2%	54499.50
ANTHRACENE*	48731.68	89%	4990.12	9%	11.54	0%	1037.25	2%	54770.59
BENZO(A)PYRE*	12765.08	87%	1581.01	11%	80.13	1%	276.38	2%	14702.59
PHENANTHRENE*	139343.48	82%	27796.53	16%	66.89	0%	2732.16	2%	169939.05
STYRENE	6012917.40	86%	2308.27	0%	842318.51	12%	108753.24	2%	6966297.43
INDN(123CDPY)*	3.14	0%	7125.34	98%	17.78	0%	103.95	1%	7250.21
CHROMIUM	80372.98	97%	1108.36	1%	205.44	0%	1116.79	1%	82803.56
CHRYSENE*	15245.21	72%	4929.88	23%	919.04	4%	186.59	1%	21280.72
MANGANESE	286005.66	99%	1549.75	1%	344.15	0%	1360.51	0%	289260.06
ARSENIC	30958.51	93%	2400.99	7%	10.57	0%	78.99	0%	33449.06

HAP	POINT	% POINT	AREA	% AREA	ONROAD	% ONROAD	NONROAD	% NONROAD	TOTAL
DIBENZAHAN*	0.10	0%	1617.36	99%	13.85	1%	2.00	0%	1633.31
XYLENE,O	1524.04	0%	99289.45	3%	3866581.33	97%	3320.01	0%	3970714.84
XYLENE,M	3444.33	0%	36972.04	1%	7351110.43	99%			7391526.80
BENZ(BK)FL*			0.22	100%					0.22
VINLIDENE CL	1.42	0%	2784.14	100%					2785.56
TCE,111	34628.29	1%	5527443.84	99%					5562072.13
XYLENE,P	983.10	3%	36972.04	97%					37955.14
PCDF*	1.13	17%	5.62	83%					6.75
TCDD,2378*	0.0008	23%	0.0027	77%					0.0035
PCDD*	0.35	25%	1.03	75%					1.38
TRICHLORETHY	1030083.13	26%	2859840.26	74%					3889923.39
VINYL CHLOR	3467.49	36%	6259.32	64%					9726.81
METHANOL	3274389.73	46%	3849269.46	54%					7123659.19
METHYL CHLOR	53463.08	50%	53522.01	50%					106985.09
TCDF,2378*	0.37	71%	0.15	29%					0.52
METHYLENE CL	4518756.95	78%	1254025.71	22%					5772782.66
CHROMIUM VI	4318.73	98%	67.28	2%					4386.01
CARBON DISUL	94401.22	99%	598.12	1%					94999.34
COBALT	10563.78	99%	63.10	1%					10626.88
TRIETHAMINE	909785.05	99%	4986.12	1%					914771.17
HCL	54378891.01	100%	210336.18	0%					54589227.19
HF	6845451.24	100%	8.39	0%					6845459.63
COKE OVEN GS	569870.17	100%							569870.17
LEAD OXIDE	102.20	100%							102.20
QUINOLINE	4087.26	100%							4087.26
TOLUENE24DII	6073.02	100%							6073.02
PCBS*	0.03	100%							0.03

* INCLUDED IN THE POM CATEGORY

PBTS ON THE LIST INCLUDE METALS (COBALT, CHROMIUM, LEAD, MERCURY, MANGANESE, NICKEL) AND POMS AND DIOXINS/FURANS

RAPIDS Toxicity-weighted Data

Appendix B-1 33 HAPS Cancer

Table B-1

Appendix B -
RAPIDS TOXICITY-WEIGHTED DATA FOR 33 HAP OF CONCERN
(CANCER) - 1999 Point + Area/1998 Mobile

HAP	TOTAL	CARCINOGENIC WEIGHT FACTOR	NON-CARCINOGENIC WEIGHT FACTOR	CARCINOGENIC WEIGHT FACTOR POUNDS	NON-CARCINOGENIC WEIGHT FACTOR POUNDS
BENZ(A)ANTHR*	24445.81	480000	170	11733990294	4155788.229
COKE OVEN GS	569870.17	4400		2507428748	
NAPHTHALENE*	1611065.53	1000	600	1611065527	966639316
ARSENIC	33449.06	31000	1700	1036920913	56863404.92
FORMALDEHYDE	9688512.17	93	2.5	901031631.5	24221280.42
BENZENE	10431048.59	56		584138721.3	
CHROMIUM VI	4386.01	86000	18000	377196559	78948117
COBALT	10626.88	34000	90000	361313903	956419155
NICKEL	69588.83	3500	25	243560891.6	1739720.654
BENZO(A)PYRE*	14702.59	15000		220538866.8	
PHENANTHRENE*	169939.05	1000		169939052.4	
ACENAPHTHYL*	77896.69	1000		77896692.88	
ANTHRACENE*	54770.59	1000	1.7	54770592.54	93110.00732
FLUORANTHENE*	54499.50	1000		54499498.74	
TRICHLORETHY	3889923.39	12.1	71	47068073.01	276184560.6
VINYL CHLOR	9726.81	3800		36961877.77	
DIBENZAHAN*	1633.31	15000		24499616.34	
METHYLENE CL	5772782.66	3.4	8.3	19627461.03	47914096.04
INDN(123CDPY*	7250.21	1500		10875317.53	
FLUORENE*	10369.78	1000		10369781.45	
PYRENE*	10368.50	1000		10368501.95	
QUINOLINE	4087.26	2400		9809424	
ACENAPHTHEN*	4175.95	1000		4175945.209	
BENZO(B)FLUO*	2482.84	1500		3724266.433	
BENZ(GHI)PE*	2055.94	1000		2055942.324	
BENZO(K)FLUO*	1025.32	1500		1537974.476	
TOLUENE24DII	6073.02	78	26000	473695.56	157898520
CHRYSENE*	21280.72	15		319210.7799	
METHYL CHLOR	106985.09	1.3		139080.6174	
VINLIDENE CL	2785.56	36	56	100280.1609	155991.3614
TCDF,2378*	0.52	23600		12376.10487	
PCDF*	6.75	1000		6748.838045	
PCDD*	1.38	1000		1377.685848	
TCDD,2378*	0.0035	236000		815.7910981	
BENZ(BK)FL*	0.22	1000		216.6400041	
PCBS*	0.03	710	25000	21.3	750
ACROLEIN	677425.53		90000		60968297337
CARBON DISUL	94999.34		100		9499934
CHROMIUM	82803.56				
ETHYLBENZENE	6926504.58		1.8		12467708.24

HAP	TOTAL	CARCINOGENIC WEIGHT FACTOR	NON-CARCINOGENIC WEIGHT FACTOR	CARCINOGENIC WEIGHT FACTOR POUNDS	NON-CARCINOGENIC WEIGHT FACTOR POUNDS
HCL	54589227.19		90		4913030447
HEXANE	10165336.77		9		91488030.93
HF	6845459.63				
LEAD	202125.20		100000		20212519708
LEAD OXIDE	102.20		100000		10220000
MANGANESE	289260.06		36000		10413362281
MERCURY	8882.83		6000		53296958.36
METHANOL	7123659.19		1		7123659.194
STYRENE	6966297.43		1.8		12539335.38
TCE,111	5562072.13		1.8		10011729.83
TOLUENE	56428927.08		4.5		253930171.9
TRIETHAMINE	914771.17		260		237840504.2
XYLENE,M	7391526.80		0.25		1847881.699
XYLENE,O	3970714.84		0.25		992678.709
XYLENE,P	37955.14		0.25		9488.784962
XYLENES ISO	41162629.56		0.25		10290657.39

* INCLUDED IN THE POM CATEGORY

RAPIDS Toxicity-weighted Data

Appendix B-2 33 HAPS Noncancer

Table B-2

Appendix B -
RAPIDS TOXICITY-WEIGHTED DATA FOR 33 HAP OF CONCERN
(NONCANCER) - 1999 Point + Area/1998 Mobile

HAP	TOTAL	CARCINOGENIC WEIGHT FACTOR	NON-CARCINOGENIC WEIGHT FACTOR	CARCINOGENIC WEIGHT FACTOR POUNDS	NON-CARCINOGENIC WEIGHT FACTOR POUNDS
ACROLEIN	677425.53		90000		60968297337
LEAD	202125.20		100000		20212519708
MANGANESE	289260.06		36000		10413362281
HCL	54589227.19		90		4913030447
NAPHTHALENE*	1611065.53	1000	600	1611065527	966639316
COBALT	10626.88	34000	90000	361313903	956419155
TRICHLORETHY	3889923.39	12.1	71	47068073.01	276184560.6
TOLUENE	56428927.08		4.5		253930171.9
TRIETHAMINE	914771.17		260		237840504.2
TOLUENE24DII	6073.02	78	26000	473695.56	157898520
HEXANE	10165336.77		9		91488030.93
CHROMIUM VI	4386.01	86000	18000	377196559	78948117
ARSENIC	33449.06	31000	1700	1036920913	56863404.92
MERCURY	8882.83		6000		53296958.36
METHYLENE CL	5772782.66	3.4	8.3	19627461.03	47914096.04
FORMALDEHYDE	9688512.17	93	2.5	901031631.5	24221280.42
STYRENE	6966297.43		1.8		12539335.38
ETHYLBENZENE	6926504.58		1.8		12467708.24
XYLENES ISO	41162629.56		0.25		10290657.39
LEAD OXIDE	102.20		100000		10220000
TCE,111	5562072.13		1.8		10011729.83
CARBON DISUL	94999.34		100		9499934
METHANOL	7123659.19		1		7123659.194
BENZ(A)ANTHR*	24445.81	480000	170	11733990294	4155788.229
XYLENE,M	7391526.80		0.25		1847881.699
NICKEL	69588.83	3500	25	243560891.6	1739720.654
XYLENE,O	3970714.84		0.25		992678.709
VINLIDENE CL	2785.56	36	56	100280.1609	155991.3614
ANTHRACENE*	54770.59	1000	1.7	54770592.54	93110.00732
XYLENE,P	37955.14		0.25		9488.784962
PCBS*	0.03	710	25000	21.3	750
COKE OVEN GS	569870.17	4400		2507428748	
BENZENE	10431048.59	56		584138721.3	
BENZO(A)PYRE*	14702.59	15000		220538866.8	
PHENANTHRENE*	169939.05	1000		169939052.4	
ACENAPHTHYL*	77896.69	1000		77896692.88	
FLUORANTHENE*	54499.50	1000		54499498.74	
VINYL CHLOR	9726.81	3800		36961877.77	
DIBENZAHAN*	1633.31	15000		24499616.34	
INDN(123CDPY*	7250.21	1500		10875317.53	

HAP	TOTAL	CARCINOGENIC WEIGHT FACTOR	NON-CARCINOGENIC WEIGHT FACTOR	CARCINOGENIC WEIGHT FACTOR POUNDS	NON-CARCINOGENIC WEIGHT FACTOR POUNDS
FLUORENE*	10369.78	1000		10369781.45	
PYRENE*	10368.50	1000		10368501.95	
QUINOLINE	4087.26	2400		9809424	
ACENAPHTHEN*	4175.95	1000		4175945.209	
BENZO(B)FLUO*	2482.84	1500		3724266.433	
BENZ(GHI)PE*	2055.94	1000		2055942.324	
BENZO(K)FLUO*	1025.32	1500		1537974.476	
CHRYSENE*	21280.72	15		319210.7799	
METHYL CHLOR	106985.09	1.3		139080.6174	
TCDF,2378*	0.52	23600		12376.10487	
PCDF*	6.75	1000		6748.838045	
PCDD*	1.38	1000		1377.685848	
TCDD,2378*	0.0035	236000		815.7910981	
BENZ(BK)FL*	0.22	1000		216.6400041	
CHROMIUM	82803.56				
HF	6845459.63				

* INCLUDED IN THE POM CATEGORY

Appendix C

IDEM Metals Monitoring Data

Summary

Tables C1 + C-2 Metals

Table C-1

Appendix C - IDEM Metals Monitoring Data (Lead), 1995-96

County	Allen	Allen	Allen	Bartholomew	De Kalb	NATA Cancer Benchmark/1 in million (ug/m3)	NATA NonCancer Benchmark/ Reference Concentration (ug/m3)
Site Name	Watkins Motor Lines	Allen County Motors	Upwind Allen Motors	Cummins	4500 Co Rd 59	Lead Compounds	Lead Compounds
Lead (TSP) ug/m3	1994	1997	1996	1992	1997		
1st Quarter Mean	0.05	0.02	0.01	0.04	0.01		
2nd Quarter Mean	0.04	0.01	0.01	0.02	0.01		
3rd Quarter Mean	0.03	0.03	0.01	0.03	0.01		
4th Quarter Mean	0.02	0.02	0.01	0.01	0.01	0.083	1.5(NAAQS)
NATA Average(4)	0.00470	0.00470	0.00470	0.00250	0.00263		
NATA Range(5)	.0025-.0079	.0025-.0079	.0025-.0079	.0017-.0039	.00127-.00387		

County	Delaware	Delaware	Lake	Lake	Lake	NATA Cancer Benchmark/1 in million (ug/m3)	NATA NonCancer Benchmark/ Reference Concentration (ug/m3)
Site Name	Mt Pleasant(1)	Mt Pleasant(2)	Water Filtration	Field School	3100 Michigan St	Lead Compounds	Lead Compounds
Lead (TSP) ug/m3	2000	2000	2000	1996	2000		
1st Quarter Mean	0.18	0.1	0.08	0.08	0.08		
2nd Quarter Mean	0.19	0.58	0.05	0.13	0.05		
3rd Quarter Mean	0.19	0.23	0.03	0.09	0.03		
4th Quarter Mean	0.13	0.26	0.06	0.05	0.06	0.083	1.5(NAAQS)
NATA Average(4)	0.03490	0.03490	0.00600	0.00600	0.00600		
NATA Range(5)	.0051-.0797	.0051-.0797	.0031-.015	.0031-.015	.0031-.015		

(1) Site 18-035-0008

(2) Site 18-035-0009

County	Lake	Lake	Lake	Porter	La Porte	NATA Cancer Benchmark/1 in million (ug/m3)	NATA NonCancer Benchmark/ Reference Concentration (ug/m3)
Site Name	1300 141st St	2345 167th St	2325 Summer St	Sprague Marina	Mullens Elem	Lead Compounds	Lead Compounds
Lead (TSP) ug/m3	2000	2000	1997	1995	1997		
1st Quarter Mean	0.05	0.02	0.05	0.02	0.01		
2nd Quarter Mean	0.04	0.05	0.1	0.03	0.02		
3rd Quarter Mean	0.02	0.02	0.11	NA	0.01		
4th Quarter Mean	0.11	0.03	0.13	NA	0.01	0.083	1.5(NAAQS)
NATA Average(4)	0.00600	0.00600	0.00600	0.00500	0.00333		
NATA Range(5)	.0031-.015	.0031-.015	.0031-.015	.003-.0092	.00102-.00819		

County	Marion	Marion	Marion	Marion	Marion	NATA Cancer Benchmark/1 in million (ug/m3)	NATA NonCancer Benchmark/ Reference Concentration (ug/m3)
Site Name	16th & Martindale	I-70 East	7601 Rockville Rd	3309 S Arlington Av	3700 S Arlington Av	Lead Compounds	Lead Compounds
Lead (TSP) ug/m3	1996	1996	2000	1999	1999		
1st Quarter Mean	0.02	0.02	0.07	0.01	0.01		
2nd Quarter Mean	0.02	0.02	0.02	0.01	0.01		
3rd Quarter Mean	0.02	0.02	0.02	0.07	0.05		
4th Quarter Mean	0.01	0.01	0.12	0.09	0.08	0.083	1.5(NAAQS)
NATA Average(4)	0.02220	0.02220	0.02220	0.02220	0.02220		
NATA Range(5)	.00659-.0627	.00659-.0627	.00659-.0627	.00659-.0627	.00659-.0627		

County	Marion	Vigo	NATA Cancer Benchmark/1 in million (ug/m3)	NATA NonCancer Benchmark/ Reference Concentration (ug/m3)
Site Name	230 S Girls School	US 41	Lead Compounds	Lead Compounds
Lead (TSP) ug/m3	2000	1998		
1st Quarter Mean	0.05	NA		
2nd Quarter Mean	0.02	0.02		
3rd Quarter Mean	0.01	0.05		
4th Quarter Mean	0.06	NA	0.083	1.5(NAAQS)
NATA Average(4)	0.02220	0.00250		
NATA Range(5)	.00659-.0627	.00108-.00429		

(4) - 1996 NATA annual average ambient modeled concentration across all census tracts in the respective county (ug/m3)

(5) - 1996 NATA Range (5th to 95th percentile) of Modeled concentrations across all census tracts in the respective county (ug/m3)

NATA Findings – Indiana

Table D-1
Cancer Risk County

Table D-1

NATA FINDINGS - INDIANA COUNTY LEVEL CUMULATIVE RISK ESTIMATES (CANCER) BASED ON 1996 DATA

EPA strongly cautions that these modeling results should not be used to draw conclusions about local concentrations or risk. The results are most meaningful when viewed at the state or national level; for smaller areas, the modeling becomes less certain. In addition, these results represent conditions in 1996 rather than current conditions.

- The exposure estimates presented below are representative of midrange estimates of population exposures. Due to a number of factors, some individuals may have substantially higher or lower exposures. It is important to note that the model, as applied on the national scale, is not designed to quantify these extreme values of individual exposures.
- Note that for certain chemicals, exposure pathways other than inhalation as well as indoor sources of air toxics may contribute substantially to total exposures of concern. This assessment does not address these other routes of exposure (i.e., ingestion or dermal) or inhalation exposure resulting from indoor sources.
- The emissions used in this assessment do not reflect potentially significant emission reductions that have taken effect since 1996, including those from: 1) mobile source regulations which are being phased in over time; 2) many of the air toxics regulations EPA has issued for major industrial sources; 3) State or industry initiatives; and 4) any facility closures.
- Methods of estimating emissions as well as simplified modeling assumptions may introduce significant uncertainties into each component of the assessment.
[For a discussion of limitations please see <http://www.epa.gov/ttn/atw/nata/natsalim2.html>](http://www.epa.gov/ttn/atw/nata/natsalim2.html)
- Because of these uncertainties, EPA will not use the results of this assessment to determine source-specific contributions or to set regulatory requirements. However, EPA expects to use these results to inform decisions about the priorities of the air toxics program as well as to guide the collection of additional data that could lead to regulatory decisions.

State	County	FIPS	Urban or Rural	Estimated Risk									Contribution to Average from ...			
				Percentile Distribution of Risk Across Census Tracts							Contribution to Average from ...					
				5th	10th	25th	Median	Average	75th	90th	95th	Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background
Indiana	Adams County	18001	U	3.74E-05	3.80E-05	4.78E-05	1.02E-04	1.97E-04	3.02E-04	4.37E-04	4.39E-04	5.30E-07	1.71E-04	3.99E-06	1.09E-06	2.00E-05
Indiana	Marion County	18097	U	7.04E-05	7.34E-05	7.97E-05	9.13E-05	1.08E-04	1.18E-04	1.65E-04	2.08E-04	3.70E-05	1.87E-05	2.55E-05	6.50E-06	2.00E-05
Indiana	Allen County	18003	U	4.21E-05	4.79E-05	5.94E-05	7.42E-05	8.66E-05	1.01E-04	1.50E-04	2.05E-04	4.28E-06	4.76E-05	1.16E-05	3.15E-06	2.00E-05
Indiana	Lake County	18089	U	5.27E-05	5.74E-05	6.71E-05	7.88E-05	7.53E-05	8.85E-05	1.05E-04	1.11E-04	1.79E-05	1.86E-05	1.26E-05	6.25E-06	2.00E-05
Indiana	Bartholomew County	18005	R	4.70E-05	4.90E-05	5.00E-05	6.62E-05	7.43E-05	8.14E-05	1.13E-04	1.52E-04	3.11E-06	4.40E-05	5.66E-06	1.40E-06	2.00E-05
Indiana	Porter County	18127	U	3.97E-05	5.04E-05	6.12E-05	6.66E-05	7.29E-05	8.15E-05	8.50E-05	8.54E-05	2.38E-05	1.72E-05	7.96E-06	4.05E-06	2.00E-05
Indiana	Johnson County	18081	U	5.13E-05	5.29E-05	6.17E-05	6.83E-05	7.15E-05	7.59E-05	9.34E-05	1.10E-04	1.28E-05	1.92E-05	1.40E-05	5.43E-06	2.00E-05
Indiana	Elkhart County	18039	R	4.07E-05	4.16E-05	4.78E-05	5.96E-05	6.99E-05	8.53E-05	1.14E-04	1.40E-04	1.07E-05	2.43E-05	1.21E-05	2.83E-06	2.00E-05
Indiana	State Urban Counties	18000	U	2.99E-05	3.33E-05	4.26E-05	5.93E-05	6.75E-05	8.18E-05	1.09E-04	1.43E-04	1.23E-05	1.79E-05	1.33E-05	3.99E-06	2.00E-05
Indiana	La Porte County	18091	U	4.30E-05	4.41E-05	4.93E-05	5.42E-05	6.57E-05	7.23E-05	9.67E-05	1.38E-04	9.79E-06	2.74E-05	6.30E-06	2.21E-06	2.00E-05
National	All Urban Counties	99998	U	2.42E-05	2.84E-05	3.74E-05	5.18E-05	6.07E-05	7.51E-05	1.04E-04	1.29E-04	3.43E-06	1.42E-05	1.43E-05	8.82E-06	2.00E-05
Indiana	State Total	18000	-	2.58E-05	2.72E-05	3.41E-05	5.00E-05	6.02E-05	7.42E-05	1.03E-04	1.30E-04	1.02E-05	1.57E-05	1.11E-05	3.30E-06	2.00E-05
Indiana	Steuben County	18151	R	3.17E-05	3.18E-05	3.38E-05	3.85E-05	5.86E-05	4.58E-05	9.91E-05	1.84E-04	2.85E-05	5.31E-06	3.74E-06	1.01E-06	2.00E-05
Indiana	Vigo County	18167	U	3.65E-05	3.73E-05	4.43E-05	5.39E-05	5.71E-05	6.44E-05	6.94E-05	7.85E-05	5.91E-07	2.54E-05	9.81E-06	1.56E-06	1.97E-05
Indiana	Hancock County	18059	U	4.71E-05	4.92E-05	5.16E-05	5.65E-05	5.62E-05	5.99E-05	6.23E-05	6.31E-05	1.26E-05	7.75E-06	1.26E-05	3.35E-06	2.00E-05
Indiana	St. Joseph County	18141	U	3.97E-05	4.35E-05	5.08E-05	5.54E-05	5.55E-05	6.39E-05	7.22E-05	8.17E-05	2.35E-06	1.58E-05	1.35E-05	3.77E-06	2.00E-05
National	All	99999	-	2.19E-05	2.41E-05	3.02E-05	4.50E-05	5.52E-05	6.74E-05	9.70E-05	1.21E-04	2.99E-06	1.26E-05	1.23E-05	7.44E-06	2.00E-05
Indiana	Fayette County	18041	U	2.72E-05	2.73E-05	2.77E-05	6.36E-05	5.39E-05	7.27E-05	7.47E-05	7.58E-05	2.07E-06	2.61E-05	4.71E-06	1.01E-06	2.00E-05
Indiana	Floyd County	18043	U	2.92E-05	3.68E-05	4.20E-05	5.96E-05	5.36E-05	6.52E-05	6.73E-05	6.84E-05	2.17E-06	1.35E-05	1.43E-05	3.69E-06	2.00E-05
Indiana	Shelby County	18145	U	4.17E-05	4.29E-05	4.57E-05	4.91E-05	5.35E-05	5.59E-05	6.07E-05	6.62E-05	1.21E-05	9.57E-06	9.30E-06	2.61E-06	1.99E-05
Indiana	Madison County	18095	U	3.40E-05	3.66E-05	4.01E-05	4.69E-05	5.30E-05	5.95E-05	9.30E-05	1.09E-04	7.56E-07	1.84E-05	1.15E-05	2.47E-06	1.98E-05
Indiana	Wabash County	18169	U	2.76E-05	2.81E-05	2.91E-05	3.58E-05	5.29E-05	7.43E-05	9.09E-05	1.07E-04	2.41E-05	3.60E-06	3.97E-06	1.16E-06	2.01E-05
Indiana	Hendricks County	18063	U	3.52E-05	3.63E-05	4.41E-05	5.16E-05	5.17E-05	5.90E-05	6.13E-05	6.22E-05	1.05E-05	6.38E-06	1.15E-05	3.36E-06	1.99E-05
Indiana	Kosciusko County	18085	R	3.33E-05	3.35E-05	3.69E-05	3.86E-05	5.11E-05	5.00E-05	7.66E-05	1.10E-04	1.56E-05	7.55E-06	4.91E-06	3.01E-06	2.00E-05
Indiana	Hamilton County	18057	U	3.55E-05	3.74E-05	4.27E-05	5.08E-05	5.06E-05	6.03E-05	6.40E-05	6.94E-05	4.58E-06	8.21E-06	1.33E-05	4.56E-06	1.99E-05
Indiana	Clark County	18019	U	3.39E-05	3.41E-05	4.08E-05	5.42E-05	5.01E-05	6.13E-05	6.51E-05	6.58E-05	2.06E-06	1.18E-05	1.26E-05	3.70E-06	2.00E-05
Indiana	Vanderburgh County	18163	U	3.53E-05	3.75E-05	4.48E-05	5.26E-05	4.97E-05	5.74E-05	6.05E-05	6.57E-05	7.60E-07	1.07E-05	1.48E-05	3.47E-06	2.00E-05
Indiana	Wayne County	18177	U	2.78E-05	2.79E-05	2.96E-05	4.38E-05	4.94E-05	6.18E-05	7.93E-05	8.57E-05	1.86E-06	2.14E-05	5.09E-06	1.02E-06	2.01E-05
Indiana	Miami County	18103	R	2.65E-05	2.69E-05	2.75E-05	3.32E-05	4.51E-05	5.57E-05	7.41E-05	1.02E-04	1.35E-06	1.85E-05	4.38E-06	9.15E-07	1.99E-05
Indiana	Jackson County	18071	R	2.62E-05	2.65E-05	2.82E-05	3.41E-05	4.47E-05	5.39E-05	8.07E-05	8.38E-05	2.26E-07	1.93E-05	4.23E-06	9.46E-07	2.00E-05
Indiana	Morgan County	18109	U	3.66E-05	3.96E-05	4.10E-05	4.39E-05	4.38E-05	4.76E-05	5.01E-05	5.15E-05	5.99E-06	6.35E-06	8.95E-06	2.69E-06	1.98E-05
Indiana	Monroe County	18105	U	3.12E-05	3.25E-05	3.70E-05	4.39E-05	4.35E-05	4.94E-05	5.65E-05	5.88E-05	2.64E-07	7.67E-06	1.18E-05	3.89E-06	1.99E-05
Indiana	Dubois County	18037	R	2.84E-05	2.85E-05	3.04E-05	3.51E-05	4.34E-05	5.42E-05	6.70E-05	7.04E-05	5.08E-06	1.37E-05	3.60E-06	9.10E-07	2.01E-05

				Estimated Risk												
State	County	FIPS	Urban or Rural	Percentile Distribution of Risk Across Census Tracts								Contribution to Average from ...				
				5th	10th	25th	Median	Average	75th	90th	95th	Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background
Indiana	Noble County	18113	R	3.44E-05	3.50E-05	3.52E-05	3.80E-05	4.31E-05	4.05E-05	5.15E-05	7.13E-05	1.03E-05	6.80E-06	4.57E-06	1.45E-06	2.00E-05
Indiana	Tippecanoe County	18157	U	2.91E-05	3.15E-05	3.71E-05	4.30E-05	4.30E-05	4.82E-05	5.35E-05	5.63E-05	2.75E-06	7.19E-06	1.10E-05	2.60E-06	1.95E-05
Indiana	Posey County	18129	U	2.73E-05	2.74E-05	2.86E-05	3.11E-05	4.20E-05	5.32E-05	6.60E-05	7.10E-05	4.97E-06	1.08E-05	4.82E-06	1.51E-06	1.99E-05
Indiana	Delaware County	18035	U	3.20E-05	3.28E-05	3.68E-05	4.25E-05	4.16E-05	5.01E-05	5.33E-05	5.39E-05	1.91E-07	9.02E-06	8.56E-06	4.05E-06	1.98E-05
Indiana	Huntington County	18069	U	2.94E-05	2.99E-05	3.21E-05	4.12E-05	3.99E-05	4.45E-05	4.79E-05	5.12E-05	2.90E-06	9.89E-06	5.49E-06	1.62E-06	2.00E-05
Indiana	State Rural Counties	18000	R	2.41E-05	2.49E-05	2.66E-05	3.05E-05	3.92E-05	3.86E-05	5.67E-05	8.12E-05	3.96E-06	9.18E-06	4.84E-06	1.30E-06	2.00E-05
Indiana	Boone County	18011	U	2.83E-05	2.96E-05	3.33E-05	3.70E-05	3.90E-05	4.16E-05	4.34E-05	4.66E-05	3.08E-06	4.45E-06	8.56E-06	3.09E-06	1.99E-05
Indiana	Lagrange County	18087	R	3.25E-05	3.32E-05	3.44E-05	3.59E-05	3.88E-05	3.75E-05	4.35E-05	4.71E-05	8.43E-06	2.99E-06	4.26E-06	3.10E-06	2.01E-05
Indiana	Dearborn County	18029	U	3.17E-05	3.18E-05	3.47E-05	3.84E-05	3.71E-05	3.97E-05	4.11E-05	4.15E-05	1.14E-06	5.92E-06	7.50E-06	2.81E-06	1.97E-05
Indiana	Howard County	18067	U	3.01E-05	3.13E-05	3.37E-05	3.80E-05	3.68E-05	4.05E-05	4.40E-05	4.48E-05	9.97E-07	3.82E-06	1.01E-05	1.95E-06	2.00E-05
Indiana	Marshall County	18099	R	2.79E-05	2.88E-05	3.16E-05	3.38E-05	3.62E-05	4.12E-05	4.27E-05	4.40E-05	2.03E-06	6.93E-06	5.70E-06	1.53E-06	2.00E-05
Indiana	Whitley County	18183	U	3.25E-05	3.31E-05	3.45E-05	3.61E-05	3.58E-05	3.82E-05	3.86E-05	3.88E-05	3.17E-06	6.99E-06	4.31E-06	1.35E-06	2.00E-05
Indiana	De Kalb County	18033	U	3.10E-05	3.12E-05	3.21E-05	3.45E-05	3.53E-05	3.66E-05	3.91E-05	4.06E-05	2.61E-06	6.66E-06	4.68E-06	1.29E-06	2.00E-05
Indiana	Brown County	18013	R	3.14E-05	3.17E-05	3.23E-05	3.34E-05	3.52E-05	3.70E-05	4.21E-05	4.38E-05	2.73E-06	5.82E-06	4.94E-06	1.87E-06	1.99E-05
Indiana	Rush County	18139	R	2.91E-05	3.06E-05	3.53E-05	3.57E-05	3.50E-05	3.60E-05	3.82E-05	3.90E-05	6.40E-06	3.85E-06	3.99E-06	9.84E-07	1.98E-05
Indiana	Henry County	18065	R	2.89E-05	2.90E-05	3.27E-05	3.62E-05	3.45E-05	3.71E-05	4.02E-05	4.20E-05	1.90E-06	4.84E-06	6.48E-06	1.40E-06	1.99E-05
Indiana	Decatur County	18031	R	3.06E-05	3.08E-05	3.14E-05	3.28E-05	3.42E-05	3.42E-05	4.00E-05	4.28E-05	3.32E-06	6.46E-06	3.63E-06	9.06E-07	1.99E-05
Indiana	Warrick County	18173	U	2.87E-05	2.94E-05	3.04E-05	3.31E-05	3.39E-05	3.55E-05	3.79E-05	3.90E-05	5.59E-07	4.56E-06	7.26E-06	1.53E-06	2.00E-05
Indiana	Perry County	18123	R	2.72E-05	2.73E-05	2.76E-05	3.52E-05	3.38E-05	3.71E-05	3.93E-05	4.01E-05	2.47E-06	6.87E-06	3.67E-06	6.57E-07	2.01E-05
Indiana	Wells County	18179	U	2.87E-05	3.05E-05	3.33E-05	3.39E-05	3.33E-05	3.47E-05	3.54E-05	3.57E-05	5.43E-07	7.71E-06	4.02E-06	1.08E-06	2.00E-05
Indiana	Harrison County	18061	U	3.04E-05	3.08E-05	3.20E-05	3.33E-05	3.32E-05	3.48E-05	3.59E-05	3.62E-05	1.17E-06	4.97E-06	5.75E-06	1.62E-06	1.97E-05
Indiana	Ohio County	18115	U	3.06E-05	3.09E-05	3.18E-05	3.34E-05	3.32E-05	3.49E-05	3.58E-05	3.61E-05	1.02E-06	4.42E-06	6.11E-06	2.02E-06	1.96E-05
Indiana	Starke County	18149	R	2.83E-05	2.89E-05	3.06E-05	3.15E-05	3.23E-05	3.39E-05	3.65E-05	3.73E-05	3.05E-06	4.98E-06	3.47E-06	9.33E-07	1.99E-05
Indiana	Grant County	18053	U	2.73E-05	2.78E-05	2.92E-05	3.14E-05	3.21E-05	3.30E-05	3.79E-05	4.17E-05	5.73E-07	4.22E-06	5.81E-06	1.45E-06	2.00E-05
Indiana	Vermillion County	18165	R	2.65E-05	2.72E-05	2.93E-05	3.03E-05	3.14E-05	3.28E-05	3.51E-05	3.59E-05	4.67E-07	6.36E-06	3.95E-06	6.38E-07	1.99E-05
Indiana	Cass County	18017	R	2.57E-05	2.67E-05	2.70E-05	2.83E-05	3.10E-05	3.47E-05	3.72E-05	3.78E-05	6.66E-07	4.43E-06	4.89E-06	1.01E-06	2.00E-05
Indiana	Clinton County	18023	R	2.69E-05	2.71E-05	2.74E-05	3.05E-05	3.10E-05	3.47E-05	3.62E-05	3.76E-05	1.25E-06	3.26E-06	5.29E-06	1.27E-06	1.99E-05
Indiana	Jefferson County	18077	U	2.63E-05	2.64E-05	2.82E-05	3.01E-05	3.09E-05	3.37E-05	3.46E-05	3.49E-05	1.89E-07	5.90E-06	3.86E-06	8.86E-07	2.00E-05
Indiana	Franklin County	18047	R	2.86E-05	2.88E-05	2.94E-05	3.03E-05	3.08E-05	3.27E-05	3.32E-05	3.33E-05	2.36E-06	3.66E-06	3.71E-06	1.18E-06	1.99E-05
Indiana	Lawrence County	18093	R	2.53E-05	2.54E-05	2.63E-05	2.96E-05	3.06E-05	3.43E-05	4.23E-05	4.37E-05	1.25E-07	5.10E-06	4.24E-06	1.16E-06	2.00E-05
National	All Rural Counties	99998	R	2.06E-05	2.16E-05	2.36E-05	2.62E-05	3.06E-05	3.13E-05	3.91E-05	4.59E-05	1.05E-06	5.31E-06	3.05E-06	1.17E-06	2.00E-05
Indiana	Blackford County	18009	U	2.68E-05	2.68E-05	2.70E-05	3.08E-05	3.06E-05	3.45E-05	3.47E-05	3.47E-05	6.23E-07	4.34E-06	4.41E-06	1.21E-06	1.99E-05
Indiana	Clay County	18021	R	2.65E-05	2.66E-05	2.69E-05	2.74E-05	3.01E-05	3.10E-05	3.44E-05	3.55E-05	5.15E-07	4.23E-06	4.66E-06	7.59E-07	2.00E-05
Indiana	Scott County	18143	U	2.73E-05	2.75E-05	2.81E-05	2.88E-05	3.00E-05	3.21E-05	3.26E-05	3.28E-05	1.69E-07	4.50E-06	4.43E-06	9.67E-07	1.99E-05
Indiana	Montgomery County	18107	R	2.46E-05	2.47E-05	2.50E-05	2.59E-05	2.97E-05	3.51E-05	3.73E-05	3.75E-05	7.69E-07	4.11E-06	3.98E-06	8.69E-07	2.00E-05
Indiana	Ripley County	18137	R	2.64E-05	2.65E-05	2.72E-05	2.90E-05	2.90E-05	2.97E-05	3.12E-05	3.18E-05	1.34E-06	3.99E-06	3.06E-06	8.58E-07	1.97E-05
Indiana	Jennings County	18079	R	2.57E-05	2.58E-05	2.63E-05	2.68E-05	2.89E-05	2.83E-05	3.82E-05	4.15E-05	2.13E-07	4.68E-06	3.36E-06	7.26E-07	1.99E-05
Indiana	Knox County	18083	U	2.41E-05	2.43E-05	2.55E-05	2.89E-05	2.88E-05	3.15E-05	3.50E-05	3.66E-05	1.18E-06	3.15E-06	3.23E-06	1.18E-06	2.01E-05
Indiana	Tipton County	18159	R	2.70E-05	2.70E-05	2.72E-05	2.79E-05	2.87E-05	2.89E-05	2.98E-05	3.01E-05	5.71E-07	3.10E-06	4.07E-06	1.06E-06	1.99E-05
Indiana	Jasper County	18073	R	2.36E-05	2.45E-05	2.62E-05	2.70E-05	2.87E-05	2.94E-05	3.26E-05	3.39E-05	3.78E-06	1.70E-06	2.54E-06	8.71E-07	1.98E-05
Indiana	Gibson County	18051	R	2.59E-05	2.60E-05	2.64E-05	2.67E-05	2.87E-05	2.71E-05	3.12E-05	3.26E-05	1.37E-06	2.64E-06	3.83E-06	9.28E-07	1.99E-05
Indiana	Greene County	18055	R	2.42E-05	2.46E-05	2.58E-05	2.66E-05	2.83E-05	3.16E-05	3.80E-05	3.80E-05	3.05E-07	3.60E-06	3.52E-06	9.17E-07	2.00E-05
Indiana	Putnam County	18133	R	2.56E-05	2.56E-05	2.59E-05	2.70E-05	2.82E-05	2.98E-05	3.05E-05	3.05E-05	7.16E-07	3.15E-06	3.71E-06	8.97E-07	1.97E-05
Indiana	Orange County	18117	R	2.59E-05	2.59E-05	2.61E-05	2.66E-05	2.82E-05	2.83E-05	3.18E-05	3.32E-05	4.08E-07	4.27E-06	2.94E-06	6.11E-07	2.00E-05
Indiana	Jay County	18075	R	2.58E-05	2.59E-05	2.62E-05	2.68E-05	2.82E-05	3.02E-05	3.10E-05	3.11E-05	2.56E-07	4.62E-06	2.56E-06	7.01E-07	2.00E-05
Indiana	Crawford County	18025	R	2.78E-05	2.79E-05	2.80E-05	2.81E-05	2.81E-05	2.84E-05	2.85E-05	2.86E-05	8.76E-07	4.42E-06	2.55E-06	6.25E-07	1.97E-05
Indiana	Spencer County	18147	R	2.72E-05	2.73E-05	2.75E-05	2.75E-05	2.80E-05	2.84E-05	2.92E-05	2.94E-05	7.82E-07	3.05E-06	3.35E-06	7.52E-07	2.00E-05
Indiana	Sullivan County	18153	R	2.49E-05	2.52E-05	2.59E-05	2.60E-05	2.79E-05	2.84E-05	2.95E-05	2.99E-05	6.28E-07	3.74E-06	3.01E-06	5.87E-07	2.00E-05
Indiana	Switzerland County	18155	R	2.73E-05	2.74E-05	2.75E-05	2.76E-05	2.79E-05	2.81E-05	2.83E-05	2.84E-05	5.17E-07	4.14E-06	2.71E-06	7.64E-07	1.97E-05
Indiana	Randolph County	18135	R	2.48E-05	2.49E-05	2.64E-05	2.72E-05	2.77E-05	2.88E-05	2.98E-05	3.08E-05	1.97E-07	3.93E-06	2.82E-06	7.58E-07	2.00E-05
Indiana	Washington County	18175	R	2.47E-05	2.50E-05	2.56E-05	2.65E-05	2.77E-05	2.75E-05	3.21E-05	3.44E-05	3.09E-07	3.71E-06	3.21E-06	7.31E-07	1.97E-05
Indiana	Daviess County	18027	R	2.39E-05	2.40E-05	2.43E-05	2.49E-05	2.76E-05	2.98E-05	3.35E-05	3.61E-05	3.34E-07	3.02E-06	3.50E-06		

				Estimated Risk												
State	County	FIPS	Urban or Rural	Percentile Distribution of Risk Across Census Tracts								Contribution to Average from ...				
				5th	10th	25th	Median	Average	75th	90th	95th	Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background
Indiana	Newton County	18111	R	2.26E-05	2.27E-05	2.28E-05	2.44E-05	2.72E-05	2.77E-05	3.06E-05	3.16E-05	2.45E-06	1.63E-06	2.28E-06	9.47E-07	1.99E-05
Indiana	Parke County	18121	R	2.46E-05	2.48E-05	2.55E-05	2.69E-05	2.69E-05	2.83E-05	2.89E-05	2.91E-05	4.72E-07	3.16E-06	2.75E-06	5.27E-07	1.99E-05
Indiana	Owen County	18119	R	2.62E-05	2.62E-05	2.62E-05	2.64E-05	2.68E-05	2.71E-05	2.76E-05	2.78E-05	3.07E-07	2.70E-06	3.45E-06	8.96E-07	1.95E-05
Indiana	Carroll County	18015	R	2.47E-05	2.49E-05	2.58E-05	2.64E-05	2.68E-05	2.74E-05	2.87E-05	2.91E-05	8.72E-07	1.76E-06	3.45E-06	8.04E-07	1.99E-05
Indiana	Fulton County	18049	R	2.37E-05	2.39E-05	2.44E-05	2.52E-05	2.66E-05	2.53E-05	2.82E-05	2.97E-05	8.92E-07	2.26E-06	2.67E-06	7.52E-07	2.00E-05
Indiana	Pike County	18125	R	2.52E-05	2.53E-05	2.57E-05	2.60E-05	2.64E-05	2.67E-05	2.77E-05	2.81E-05	6.02E-07	2.78E-06	2.52E-06	5.69E-07	2.00E-05
Indiana	Union County	18161	R	2.54E-05	2.55E-05	2.58E-05	2.63E-05	2.61E-05	2.68E-05	2.71E-05	2.72E-05	4.88E-07	2.23E-06	2.73E-06	8.31E-07	1.98E-05
Indiana	Martin County	18101	R	2.41E-05	2.42E-05	2.43E-05	2.47E-05	2.60E-05	2.58E-05	2.74E-05	2.79E-05	3.63E-07	3.00E-06	2.06E-06	4.92E-07	2.01E-05
Indiana	Fountain County	18045	R	2.41E-05	2.43E-05	2.49E-05	2.49E-05	2.57E-05	2.50E-05	2.88E-05	3.00E-05	2.49E-07	2.45E-06	2.40E-06	5.92E-07	2.00E-05
Indiana	White County	18181	R	2.32E-05	2.32E-05	2.34E-05	2.43E-05	2.52E-05	2.48E-05	2.63E-05	2.78E-05	1.56E-07	1.52E-06	2.73E-06	8.20E-07	2.00E-05
Indiana	Pulaski County	18131	R	2.31E-05	2.33E-05	2.41E-05	2.54E-05	2.51E-05	2.63E-05	2.63E-05	2.64E-05	9.15E-07	1.65E-06	2.00E-06	4.69E-07	2.01E-05
Indiana	Warren County	18171	R	2.37E-05	2.37E-05	2.38E-05	2.39E-05	2.39E-05	2.39E-05	2.40E-05	2.40E-05	2.59E-07	1.21E-06	2.04E-06	5.24E-07	1.98E-05
Indiana	Benton County	18007	R	2.25E-05	2.25E-05	2.27E-05	2.30E-05	2.31E-05	2.33E-05	2.35E-05	2.35E-05	1.21E-07	7.35E-07	1.91E-06	4.88E-07	1.98E-05

NATA Findings – Indiana

Table D-2 Cancer Risk Census Tract

Table D-2

NATA FINDINGS - INDIANA CENSUS TRACT LEVEL CUMULATIVE RISK ESTIMATES (CANCER) BASED ON 1996 DATA

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Allen County	2200	00322	-85.173736	41.064748	2881	U	1.65E-05	6.21E-04	1.41E-05	3.58E-06	2.01E-05	6.75E-04
Indiana	Marion Count	342600	0973426	-86.202501	39.755109	3960	U	4.59E-04	4.76E-05	2.87E-05	7.56E-06	1.99E-05	5.63E-04
Indiana	Marion Count	358100	0973581	-86.191174	39.748633	3854	U	3.92E-04	4.69E-05	2.38E-05	6.67E-06	2.00E-05	4.90E-04
Indiana	Adams Count	30200	001302	-84.940355	40.829529	4131	U	9.37E-07	4.11E-04	6.41E-06	1.70E-06	2.01E-05	4.40E-04
Indiana	Adams Count	30300	001303	-84.92039	40.826527	6262	U	7.44E-07	4.07E-04	6.11E-06	1.64E-06	2.00E-05	4.35E-04
Indiana	Vigo County	1900	16719	-87.416672	39.438136	1658	U	7.16E-07	3.84E-04	1.12E-05	1.84E-06	1.99E-05	4.17E-04
Indiana	Allen County	1000	00310	-85.162751	41.078933	1490	U	3.89E-05	2.87E-04	1.24E-05	3.57E-06	2.00E-05	3.62E-04
Indiana	Marion Count	342500	0973425	-86.236157	39.756514	4953	U	2.40E-04	4.48E-05	2.39E-05	6.37E-06	2.00E-05	3.35E-04
Indiana	Marion Count	342400	0973424	-86.221243	39.74137	1877	U	2.42E-04	3.64E-05	2.11E-05	7.48E-06	2.00E-05	3.27E-04
Indiana	Marion Count	356400	0973564	-86.189653	39.765651	4360	U	1.83E-04	3.52E-05	2.53E-05	6.18E-06	2.01E-05	2.70E-04
Indiana	Steuben Cou	970900	1519709	-85.014291	41.731284	2250	R	2.36E-04	7.83E-06	3.15E-06	8.72E-07	2.01E-05	2.68E-04
Indiana	Marion Count	330600	0973306	-86.03657	39.846417	5323	U	1.56E-05	1.98E-04	2.73E-05	5.88E-06	2.00E-05	2.66E-04
Indiana	Marion Count	341400	0973414	-86.202527	39.768501	2239	U	1.75E-04	3.51E-05	2.97E-05	6.70E-06	2.01E-05	2.66E-04
Indiana	Marion Count	356900	0973569	-86.154908	39.746153	3410	U	1.25E-04	5.81E-05	3.90E-05	1.03E-05	2.01E-05	2.52E-04
Indiana	Marion Count	356300	0973563	-86.162217	39.758241	537	U	1.41E-04	4.29E-05	3.10E-05	1.15E-05	2.01E-05	2.46E-04
Indiana	Allen County	2100	00321	-85.15526	41.06502	2815	U	1.50E-05	1.79E-04	1.49E-05	4.23E-06	2.01E-05	2.33E-04
Indiana	Allen County	1100	00311	-85.152418	41.074997	1994	U	2.35E-05	1.70E-04	1.53E-05	3.86E-06	2.00E-05	2.32E-04
Indiana	Marion Count	342200	0973422	-86.258157	39.752427	5967	U	1.19E-04	6.00E-05	2.23E-05	7.10E-06	2.00E-05	2.29E-04
Indiana	Allen County	900	0039	-85.166024	41.087011	3534	U	1.39E-05	1.61E-04	1.69E-05	4.30E-06	2.00E-05	2.17E-04
Indiana	Marion Count	358000	0973580	-86.163134	39.738107	1875	U	1.12E-04	4.31E-05	2.53E-05	8.31E-06	2.00E-05	2.09E-04
Indiana	Bartholomew	10700	005107	-85.893178	39.210157	3618	R	2.77E-06	1.71E-04	7.52E-06	1.51E-06	1.99E-05	2.03E-04
Indiana	Marion Count	341500	0973415	-86.211178	39.772973	1728	U	1.20E-04	2.63E-05	2.56E-05	7.22E-06	2.01E-05	1.99E-04
Indiana	Marion Count	356200	0973562	-86.150981	39.762226	1963	U	1.04E-04	3.50E-05	3.09E-05	7.76E-06	2.01E-05	1.98E-04
Indiana	Marion Count	357000	0973570	-86.145893	39.746005	3430	U	1.06E-04	3.02E-05	3.39E-05	7.53E-06	2.00E-05	1.98E-04
Indiana	Marion Count	357800	0973578	-86.146806	39.737395	2330	U	8.71E-05	4.29E-05	3.61E-05	9.06E-06	1.98E-05	1.95E-04
Indiana	Elkhart Count	2300	03923	-85.991025	41.674214	2664	R	8.29E-06	1.41E-04	1.86E-05	2.81E-06	2.01E-05	1.91E-04
Indiana	Marion Count	357100	0973571	-86.136087	39.747431	2825	U	1.01E-04	2.62E-05	3.26E-05	7.46E-06	2.01E-05	1.87E-04
Indiana	Marion Count	357200	0973572	-86.126612	39.750709	4336	U	9.79E-05	2.64E-05	3.47E-05	7.75E-06	2.02E-05	1.87E-04
Indiana	Marion Count	355900	0973559	-86.136766	39.756058	3402	U	1.01E-04	2.42E-05	3.25E-05	7.74E-06	2.00E-05	1.86E-04
Indiana	Marion Count	341700	0973417	-86.227314	39.770805	5478	U	1.01E-04	2.72E-05	2.02E-05	5.54E-06	1.99E-05	1.74E-04
Indiana	Marion Count	341600	0973416	-86.206385	39.778038	2999	U	9.40E-05	2.09E-05	2.85E-05	6.86E-06	2.00E-05	1.70E-04
Indiana	Adams Count	30600	001306	-84.952932	40.656482	3374	U	3.38E-07	1.43E-04	4.28E-06	1.06E-06	1.98E-05	1.68E-04

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Allen County	1200	00312	-85.145184	41.076104	1320	U	1.36E-05	1.15E-04	1.44E-05	3.56E-06	2.01E-05	1.67E-04
Indiana	Madison Cou	900	0959	-85.670671	40.09294	2239	U	2.08E-06	1.16E-04	2.45E-05	4.16E-06	2.00E-05	1.67E-04
Indiana	Marion Count	354100	0973541	-86.158425	39.776894	1597	U	7.29E-05	2.49E-05	4.02E-05	7.33E-06	2.01E-05	1.65E-04
Indiana	Marion Count	353900	0973539	-86.180543	39.776846	972	U	7.91E-05	2.93E-05	2.87E-05	7.15E-06	2.02E-05	1.64E-04
Indiana	Allen County	600	0036	-85.150254	41.086107	2274	U	1.16E-05	1.12E-04	1.48E-05	3.80E-06	2.00E-05	1.62E-04
Indiana	Lake County	12000	089120	-87.309556	41.580456	2645	U	2.07E-05	1.04E-04	1.16E-05	6.63E-06	1.99E-05	1.62E-04
Indiana	Marion Count	354200	0973542	-86.150128	39.775414	3547	U	6.98E-05	2.40E-05	3.91E-05	7.15E-06	2.01E-05	1.60E-04
Indiana	Allen County	2400	00324	-85.169531	41.050518	1795	U	8.03E-06	1.14E-04	1.34E-05	3.64E-06	2.01E-05	1.59E-04
Indiana	La Porte Cou	42300	091423	-86.719446	41.61004	2428	U	1.23E-05	1.06E-04	1.51E-05	4.32E-06	2.01E-05	1.58E-04
Indiana	Allen County	2000	00320	-85.145922	41.063383	3188	U	1.04E-05	1.05E-04	1.67E-05	4.54E-06	2.01E-05	1.57E-04
Indiana	Marion Count	355700	0973557	-86.12557	39.761425	3210	U	8.04E-05	2.24E-05	2.68E-05	6.42E-06	2.00E-05	1.56E-04
Indiana	Marion Count	354700	0973547	-86.123673	39.774672	2638	U	5.94E-05	2.17E-05	4.28E-05	8.53E-06	2.01E-05	1.53E-04
Indiana	Marion Count	357300	0973573	-86.12196	39.742605	2311	U	7.60E-05	2.38E-05	2.53E-05	6.16E-06	2.02E-05	1.52E-04
Indiana	La Porte Cou	42100	091421	-86.703457	41.610461	6368	U	1.72E-05	9.88E-05	9.20E-06	2.99E-06	2.02E-05	1.48E-04
Indiana	Marion Count	341200	0973412	-86.203927	39.783914	3362	U	7.17E-05	1.99E-05	3.02E-05	6.53E-06	2.00E-05	1.48E-04
Indiana	Marion Count	342197	0973421.97	-86.278388	39.749976	3527	U	6.73E-05	2.29E-05	2.68E-05	1.05E-05	1.98E-05	1.47E-04
Indiana	Marion Count	354500	0973545	-86.128723	39.772576	3728	U	6.53E-05	2.09E-05	3.39E-05	7.06E-06	2.01E-05	1.47E-04
Indiana	Marion Count	355600	0973556	-86.110297	39.762446	2462	U	7.27E-05	2.31E-05	2.50E-05	6.26E-06	2.00E-05	1.47E-04
Indiana	Elkhart Count	1700	03917	-85.958157	41.720993	6387	R	5.93E-05	4.53E-05	1.70E-05	2.87E-06	2.00E-05	1.45E-04
Indiana	Marion Count	354400	0973544	-86.136809	39.771214	1820	U	6.55E-05	2.11E-05	3.11E-05	6.97E-06	2.00E-05	1.45E-04
Indiana	Allen County	800	0038	-85.16227	41.094445	4334	U	8.82E-06	9.77E-05	1.36E-05	3.43E-06	1.99E-05	1.43E-04
Indiana	Marion Count	353500	0973535	-86.171537	39.781504	1909	U	6.11E-05	3.00E-05	2.52E-05	6.44E-06	1.99E-05	1.43E-04
Indiana	Marion Count	357900	0973579	-86.147065	39.729291	4296	U	6.61E-05	2.55E-05	2.57E-05	6.31E-06	1.99E-05	1.43E-04
Indiana	Allen County	1900	00319	-85.14247	41.067311	981	U	1.01E-05	9.35E-05	1.48E-05	3.72E-06	1.98E-05	1.42E-04
Indiana	Marion Count	342300	0973423	-86.238422	39.728823	6712	U	6.67E-05	2.29E-05	2.36E-05	7.05E-06	1.99E-05	1.40E-04
Indiana	Marion Count	357400	0973574	-86.094303	39.746142	4992	U	6.63E-05	2.12E-05	2.61E-05	6.22E-06	2.02E-05	1.40E-04
Indiana	Marion Count	361200	0973612	-86.073646	39.762824	3782	U	5.17E-05	2.58E-05	3.33E-05	7.86E-06	2.01E-05	1.39E-04
Indiana	Marion Count	355000	0973550	-86.115388	39.771407	3492	U	5.96E-05	2.00E-05	3.10E-05	6.71E-06	2.00E-05	1.37E-04
Indiana	Elkhart Count	2400	03924	-85.990442	41.686907	4533	R	9.26E-06	8.86E-05	1.57E-05	2.37E-06	2.02E-05	1.36E-04
Indiana	Marion Count	355100	0973551	-86.101144	39.770982	2780	U	5.61E-05	2.11E-05	3.16E-05	6.69E-06	2.01E-05	1.36E-04
Indiana	Lake County	12900	089129	-87.325844	41.577661	1827	U	2.03E-05	7.33E-05	1.54E-05	6.33E-06	2.01E-05	1.35E-04
Indiana	Lake County	40100	089401	-87.490312	41.671772	1570	U	6.74E-05	1.82E-05	1.31E-05	1.62E-05	2.00E-05	1.35E-04
Indiana	Marion Count	357600	0973576	-86.124728	39.731347	7575	U	6.05E-05	2.12E-05	2.64E-05	6.43E-06	1.98E-05	1.34E-04
Indiana	Marion Count	355500	0973555	-86.091429	39.761059	3721	U	6.31E-05	1.84E-05	2.59E-05	6.10E-06	1.99E-05	1.33E-04
Indiana	Marion Count	341100	0973411	-86.217453	39.783767	2273	U	5.81E-05	2.04E-05	2.68E-05	6.68E-06	1.99E-05	1.32E-04

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Marion Count	353200	0973532	-86.148615	39.788111	1823	U	4.78E-05	2.03E-05	3.59E-05	6.68E-06	2.01E-05	1.31E-04
Indiana	Allen County	701	0037.01	-85.148995	41.094549	3435	U	7.73E-06	8.27E-05	1.51E-05	4.01E-06	2.01E-05	1.30E-04
Indiana	Bartholomew	10800	005108	-85.892589	39.196646	4080	R	2.57E-06	1.00E-04	5.31E-06	1.38E-06	2.00E-05	1.30E-04
Indiana	Marion Count	354800	0973548	-86.117144	39.777639	2591	U	5.20E-05	1.88E-05	3.21E-05	6.79E-06	2.01E-05	1.30E-04
Indiana	Marion Count	361300	0973613	-86.039737	39.765564	2638	U	3.62E-05	3.22E-05	3.29E-05	8.48E-06	1.99E-05	1.30E-04
Indiana	Allen County	1500	00315	-85.104964	41.07415	1379	U	4.62E-06	8.29E-05	1.74E-05	4.38E-06	2.02E-05	1.29E-04
Indiana	Madison Cou	800	0958	-85.676998	40.093113	2534	U	1.07E-06	8.03E-05	2.41E-05	3.96E-06	1.99E-05	1.29E-04
Indiana	Marion Count	354900	0973549	-86.105326	39.778013	3265	U	5.04E-05	2.10E-05	3.06E-05	6.82E-06	2.00E-05	1.29E-04
Indiana	Miami County	952300	1039523	-86.080756	40.749337	3097	R	1.99E-06	1.00E-04	5.46E-06	9.07E-07	2.00E-05	1.29E-04
Indiana	Marion Count	355400	0973554	-86.090492	39.771224	3508	U	4.93E-05	1.82E-05	3.14E-05	7.36E-06	2.00E-05	1.26E-04
Indiana	Kosciusko Co	962000	0859620	-85.835378	41.244587	3809	R	6.78E-05	2.81E-05	6.48E-06	2.68E-06	1.99E-05	1.25E-04
Indiana	La Porte Cou	42000	091420	-86.715862	41.633963	2211	U	1.16E-05	8.44E-05	5.96E-06	2.23E-06	2.01E-05	1.24E-04
Indiana	Marion Count	353100	0973531	-86.142837	39.791309	895	U	4.25E-05	2.77E-05	2.77E-05	5.63E-06	2.01E-05	1.24E-04
Indiana	Wabash Cour	992800	1699928	-85.831806	40.787562	4042	U	9.22E-05	5.03E-06	4.56E-06	1.23E-06	2.01E-05	1.23E-04
Indiana	Marion Count	351100	0973511	-86.181716	39.81329	2895	U	3.18E-05	2.40E-05	3.14E-05	1.38E-05	1.99E-05	1.21E-04
Indiana	Allen County	1300	00313	-85.132957	41.079739	1673	U	1.06E-05	7.29E-05	1.30E-05	3.13E-06	2.01E-05	1.20E-04
Indiana	Marion Count	353600	0973536	-86.186856	39.792973	3410	U	4.98E-05	1.99E-05	2.39E-05	6.01E-06	2.00E-05	1.20E-04
Indiana	Marion Count	361100	0973611	-86.07331	39.771068	3685	U	4.31E-05	1.82E-05	3.19E-05	7.12E-06	1.98E-05	1.20E-04
Indiana	Lake County	12800	089128	-87.332553	41.574248	1940	U	1.93E-05	6.20E-05	1.21E-05	5.64E-06	2.01E-05	1.19E-04
Indiana	Marion Count	353300	0973533	-86.156508	39.788169	3235	U	4.59E-05	1.92E-05	2.77E-05	5.93E-06	1.99E-05	1.19E-04
Indiana	Marion Count	350200	0973502	-86.181987	39.818322	453	U	2.92E-05	2.33E-05	3.16E-05	1.42E-05	2.01E-05	1.18E-04
Indiana	Marion Count	352500	0973525	-86.093199	39.784931	3322	U	4.01E-05	1.73E-05	3.42E-05	6.78E-06	2.00E-05	1.18E-04
Indiana	Marion Count	355300	0973553	-86.089542	39.778211	2991	U	4.40E-05	1.77E-05	3.02E-05	6.26E-06	2.02E-05	1.18E-04
Indiana	Marion Count	380200	0973802	-86.154025	39.715954	3423	U	4.16E-05	2.13E-05	2.76E-05	7.90E-06	2.01E-05	1.18E-04
Indiana	Elkhart Count	2700	03927	-85.979148	41.683617	2963	R	1.00E-05	6.75E-05	1.75E-05	2.37E-06	1.99E-05	1.17E-04
Indiana	Lake County	31000	089310	-87.441683	41.644744	1873	U	3.05E-05	3.54E-05	2.10E-05	9.58E-06	2.02E-05	1.17E-04
Indiana	Marion Count	341901	0973419.01	-86.26115	39.770474	5680	U	5.04E-05	1.86E-05	2.14E-05	6.61E-06	2.00E-05	1.17E-04
Indiana	Marion Count	357500	0973575	-86.096789	39.729413	5090	U	4.20E-05	2.55E-05	2.36E-05	5.79E-06	1.99E-05	1.17E-04
Indiana	Marion Count	341000	0973410	-86.245873	39.7849	2069	U	3.86E-05	2.91E-05	2.07E-05	6.33E-06	2.01E-05	1.15E-04
Indiana	Marion Count	352600	0973526	-86.110077	39.787206	5656	U	4.11E-05	1.90E-05	2.85E-05	6.05E-06	1.99E-05	1.15E-04
Indiana	St. Joseph Co	2000	14120	-86.263256	41.673064	1525	U	2.40E-06	7.09E-05	1.69E-05	4.48E-06	2.01E-05	1.15E-04
Indiana	Marion Count	352700	0973527	-86.123459	39.785509	3963	U	4.36E-05	1.64E-05	2.86E-05	5.93E-06	1.99E-05	1.14E-04
Indiana	Marion Count	360700	0973607	-86.056727	39.774143	2192	U	3.79E-05	2.43E-05	2.43E-05	6.19E-06	2.02E-05	1.13E-04
Indiana	Marion Count	361000	0973610	-86.074152	39.778535	2356	U	3.84E-05	1.72E-05	3.05E-05	6.64E-06	2.00E-05	1.13E-04
Indiana	Allen County	1600	00316	-85.09823	41.066627	2836	U	5.13E-06	6.97E-05	1.35E-05	3.50E-06	1.99E-05	1.12E-04

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Johnson Cou	610500	0816105	-86.091565	39.553416	5510	U	1.18E-05	5.95E-05	1.45E-05	5.97E-06	2.01E-05	1.12E-04
Indiana	Marion Count	341902	0973419.02	-86.279257	39.768732	3305	U	4.57E-05	1.85E-05	2.06E-05	7.25E-06	2.00E-05	1.12E-04
Indiana	Allen County	2500	00325	-85.152009	41.053329	3939	U	7.98E-06	6.25E-05	1.64E-05	4.65E-06	1.98E-05	1.11E-04
Indiana	Lake County	30300	089303	-87.464021	41.629735	3642	U	2.89E-05	3.73E-05	1.50E-05	9.84E-06	1.99E-05	1.11E-04
Indiana	Johnson Cou	610900	0816109	-86.063093	39.490417	5029	U	1.80E-05	5.28E-05	1.32E-05	5.36E-06	2.02E-05	1.10E-04
Indiana	Lake County	30500	089305	-87.482779	41.63408	4422	U	2.30E-05	3.99E-05	1.73E-05	9.37E-06	2.01E-05	1.10E-04
Indiana	Marion Count	351600	0973516	-86.156159	39.799207	2009	U	3.36E-05	1.91E-05	3.00E-05	7.25E-06	2.01E-05	1.10E-04
Indiana	Marion Count	370202	0973702.02	-86.231621	39.713044	5951	U	5.09E-05	1.27E-05	1.96E-05	7.35E-06	1.99E-05	1.10E-04
Indiana	Allen County	500	0035	-85.137319	41.096184	3468	U	6.30E-06	6.63E-05	1.28E-05	3.34E-06	2.02E-05	1.09E-04
Indiana	Allen County	1800	00318	-85.132618	41.064977	1698	U	6.77E-06	6.44E-05	1.47E-05	3.58E-06	1.99E-05	1.09E-04
Indiana	Lake County	30400	089304	-87.475959	41.634109	3727	U	2.33E-05	3.86E-05	1.76E-05	9.42E-06	2.00E-05	1.09E-04
Indiana	Lake County	41700	089417	-87.272896	41.570218	5125	U	2.16E-05	4.52E-05	1.25E-05	9.29E-06	1.99E-05	1.09E-04
Indiana	Marion Count	351200	0973512	-86.174348	39.805607	3881	U	3.56E-05	1.84E-05	2.82E-05	6.11E-06	2.03E-05	1.09E-04
Indiana	Marion Count	361400	0973614	-86.057257	39.744901	6345	U	4.34E-05	1.57E-05	2.38E-05	6.29E-06	2.00E-05	1.09E-04
Indiana	Kosciusko Co	961900	0859619	-85.854633	41.238508	2997	R	5.07E-05	2.39E-05	8.88E-06	3.99E-06	2.01E-05	1.08E-04
Indiana	Marion Count	352800	0973528	-86.12848	39.796192	1869	U	3.54E-05	2.02E-05	2.60E-05	6.07E-06	2.00E-05	1.08E-04
Indiana	Marion Count	360302	0973603.02	-86.058105	39.799826	3034	U	2.77E-05	2.70E-05	2.65E-05	7.00E-06	1.99E-05	1.08E-04
Indiana	Marion Count	380300	0973803	-86.128801	39.715854	5753	U	4.03E-05	1.55E-05	2.53E-05	6.31E-06	2.00E-05	1.07E-04
Indiana	Lake County	12100	089121	-87.281628	41.590772	4900	U	2.46E-05	4.16E-05	1.13E-05	8.75E-06	1.99E-05	1.06E-04
Indiana	Marion Count	340600	0973406	-86.209561	39.796417	5256	U	3.93E-05	1.61E-05	2.48E-05	5.87E-06	1.99E-05	1.06E-04
Indiana	Marion Count	351500	0973515	-86.158809	39.805988	2841	U	3.07E-05	1.67E-05	3.17E-05	7.33E-06	1.99E-05	1.06E-04
Indiana	Marion Count	351700	0973517	-86.142324	39.80203	3474	U	3.27E-05	2.00E-05	2.68E-05	6.21E-06	1.99E-05	1.06E-04
Indiana	Allen County	11501	003115.01	-85.214067	41.068815	3568	U	5.22E-06	6.46E-05	1.15E-05	3.49E-06	2.00E-05	1.05E-04
Indiana	Lake County	30100	089301	-87.440098	41.647547	1352	U	3.17E-05	2.72E-05	1.78E-05	8.71E-06	2.00E-05	1.05E-04
Indiana	Lake County	30800	089308	-87.451867	41.641306	4970	U	2.93E-05	2.85E-05	1.72E-05	9.37E-06	2.02E-05	1.05E-04
Indiana	Madison Cou	1000	09510	-85.658475	40.093202	3260	U	7.05E-07	6.80E-05	1.40E-05	2.72E-06	1.98E-05	1.05E-04
Indiana	Marion Count	340800	0973408	-86.245623	39.795395	1983	U	3.28E-05	1.87E-05	2.60E-05	6.77E-06	2.03E-05	1.05E-04
Indiana	Marion Count	350100	0973501	-86.187036	39.803902	1676	U	3.85E-05	1.80E-05	2.28E-05	5.93E-06	2.01E-05	1.05E-04
Indiana	Marion Count	351900	0973519	-86.123603	39.806687	2411	U	2.86E-05	1.93E-05	3.03E-05	6.60E-06	2.00E-05	1.05E-04
Indiana	Marion Count	352400	0973524	-86.090394	39.793308	3199	U	3.51E-05	1.77E-05	2.60E-05	5.97E-06	1.99E-05	1.05E-04
Indiana	Allen County	2700	00327	-85.131974	41.056491	2800	U	5.69E-06	5.84E-05	1.60E-05	3.99E-06	2.00E-05	1.04E-04
Indiana	Lake County	30700	089307	-87.457581	41.627146	2586	U	2.29E-05	3.68E-05	1.45E-05	9.29E-06	2.01E-05	1.04E-04
Indiana	Madison Cou	700	0957	-85.682897	40.091441	1257	U	7.76E-07	5.57E-05	2.40E-05	3.89E-06	1.99E-05	1.04E-04
Indiana	Marion Count	380401	0973804.01	-86.095365	39.715863	7326	U	3.54E-05	1.83E-05	2.48E-05	5.88E-06	2.00E-05	1.04E-04
Indiana	Marion Count	351000	0973510	-86.157535	39.81337	3780	U	2.69E-05	1.71E-05	3.13E-05	7.39E-06	2.01E-05	1.03E-04

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Marion Count	352100	0973521	-86.109288	39.804203	3526	U	3.05E-05	1.89E-05	2.77E-05	6.11E-06	2.01E-05	1.03E-04
Indiana	Marion Count	360900	0973609	-86.073635	39.788565	5566	U	3.13E-05	1.59E-05	2.93E-05	6.11E-06	2.00E-05	1.03E-04
Indiana	Adams Count	30100	001301	-84.937459	40.872167	4675	U	5.81E-07	7.66E-05	3.39E-06	9.88E-07	2.00E-05	1.02E-04
Indiana	Allen County	702	0037.02	-85.162967	41.112383	2361	U	4.68E-06	5.84E-05	1.41E-05	3.67E-06	2.00E-05	1.01E-04
Indiana	Allen County	2897	00328.97	-85.119992	41.056833	3099	U	5.35E-06	5.22E-05	1.85E-05	4.85E-06	2.00E-05	1.01E-04
Indiana	Marion Count	340102	0973401.02	-86.295176	39.772696	3898	U	3.33E-05	2.08E-05	1.99E-05	7.38E-06	1.99E-05	1.01E-04
Indiana	Allen County	300	0033	-85.122069	41.093252	3667	U	6.03E-06	5.07E-05	1.89E-05	4.90E-06	1.99E-05	1.00E-04
Indiana	Allen County	2600	00326	-85.141934	41.05378	3775	U	4.59E-06	5.36E-05	1.70E-05	4.50E-06	2.00E-05	9.97E-05
Indiana	Elkhart Count	1600	03916	-85.981698	41.716256	8058	R	2.06E-05	4.01E-05	1.61E-05	2.86E-06	2.00E-05	9.96E-05
Indiana	Allen County	1400	00314	-85.120081	41.076828	2292	U	5.43E-06	5.68E-05	1.38E-05	3.43E-06	1.99E-05	9.94E-05
Indiana	Marion Count	340700	0973407	-86.225296	39.799615	4156	U	3.45E-05	1.68E-05	2.22E-05	5.92E-06	2.00E-05	9.94E-05
Indiana	Lake County	12200	089122	-87.326492	41.584021	3647	U	2.01E-05	3.81E-05	1.44E-05	6.24E-06	2.01E-05	9.88E-05
Indiana	Lake County	40200	089402	-87.495935	41.679018	3669	U	2.67E-05	1.91E-05	1.70E-05	1.56E-05	2.01E-05	9.85E-05
Indiana	Marion Count	360800	0973608	-86.054119	39.786455	2780	U	3.01E-05	1.74E-05	2.51E-05	5.88E-06	1.99E-05	9.83E-05
Indiana	Marion Count	342000	0973420	-86.309395	39.744869	3333	U	3.89E-05	1.38E-05	1.68E-05	8.64E-06	2.01E-05	9.82E-05
Indiana	Marion Count	350900	0973509	-86.146405	39.812988	2760	U	2.56E-05	1.56E-05	3.03E-05	6.69E-06	1.99E-05	9.81E-05
Indiana	Lake County	30200	089302	-87.449345	41.648532	1726	U	3.43E-05	2.07E-05	1.46E-05	8.41E-06	2.00E-05	9.80E-05
Indiana	Marion Count	350300	0973503	-86.158685	39.821049	3273	U	2.41E-05	1.65E-05	2.98E-05	7.43E-06	2.01E-05	9.78E-05
Indiana	Lake County	20200	089202	-87.509146	41.656857	6461	U	3.82E-05	1.53E-05	1.22E-05	1.18E-05	2.00E-05	9.74E-05
Indiana	Marion Count	330700	0973307	-86.00661	39.84743	5348	U	1.44E-05	2.71E-05	2.76E-05	8.28E-06	2.00E-05	9.74E-05
Indiana	Marion Count	380600	0973806	-86.152469	39.700321	3944	U	2.34E-05	1.96E-05	2.67E-05	7.68E-06	2.01E-05	9.74E-05
Indiana	Lake County	30900	089309	-87.442048	41.639559	4540	U	2.79E-05	2.78E-05	1.38E-05	7.70E-06	1.99E-05	9.71E-05
Indiana	Marion Count	380502	0973805.02	-86.123459	39.704777	3487	U	3.26E-05	1.48E-05	2.33E-05	6.10E-06	2.01E-05	9.69E-05
Indiana	Marion Count	360101	0973601.01	-86.073302	39.802635	2734	U	2.73E-05	1.82E-05	2.48E-05	5.95E-06	2.01E-05	9.63E-05
Indiana	Allen County	1700	00317	-85.121653	41.065003	2612	U	5.41E-06	5.44E-05	1.32E-05	3.31E-06	1.99E-05	9.62E-05
Indiana	Lake County	12700	089127	-87.344749	41.571154	1990	U	1.88E-05	4.01E-05	1.18E-05	5.57E-06	1.99E-05	9.60E-05
Indiana	Lake County	30600	089306	-87.485376	41.621073	5055	U	2.02E-05	3.33E-05	1.47E-05	7.71E-06	2.01E-05	9.60E-05
Indiana	Marion Count	350800	0973508	-86.129497	39.813673	3218	U	2.44E-05	1.54E-05	2.93E-05	6.92E-06	1.99E-05	9.59E-05
Indiana	Marion Count	350400	0973504	-86.144867	39.820939	3506	U	2.34E-05	1.48E-05	3.05E-05	7.07E-06	2.00E-05	9.58E-05
Indiana	Marion Count	360601	0973606.01	-86.017913	39.784983	4850	U	2.65E-05	1.59E-05	2.73E-05	6.17E-06	1.99E-05	9.58E-05
Indiana	Marion Count	360602	0973606.02	-86.035539	39.786252	5514	U	2.76E-05	1.62E-05	2.60E-05	5.82E-06	1.99E-05	9.55E-05
Indiana	Marion Count	322100	0973221	-86.146886	39.828399	3592	U	2.33E-05	1.54E-05	2.92E-05	7.06E-06	2.02E-05	9.50E-05
Indiana	Marion Count	352300	0973523	-86.094496	39.81004	2135	U	2.66E-05	1.73E-05	2.48E-05	5.83E-06	2.01E-05	9.47E-05
Indiana	Allen County	400	0034	-85.120874	41.086124	2798	U	5.71E-06	5.36E-05	1.19E-05	3.08E-06	2.01E-05	9.44E-05
Indiana	Lake County	20100	089201	-87.506565	41.680903	5081	U	2.51E-05	1.95E-05	1.51E-05	1.42E-05	2.01E-05	9.40E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Elkhart Count	2500	03925	-85.946225	41.690585	4376	R	1.38E-05	3.59E-05	2.09E-05	3.21E-06	2.00E-05	9.39E-05
Indiana	Lake County	20800	089208	-87.499191	41.601904	2582	U	1.93E-05	3.56E-05	1.27E-05	5.92E-06	2.01E-05	9.37E-05
Indiana	Marion Count	360202	0973602.02	-86.021824	39.820927	3493	U	1.92E-05	2.46E-05	2.39E-05	5.85E-06	2.01E-05	9.36E-05
Indiana	Lake County	10700	089107	-87.350095	41.605317	1373	U	2.18E-05	3.41E-05	1.26E-05	5.05E-06	2.01E-05	9.35E-05
Indiana	Marion Count	370201	0973702.01	-86.251043	39.70132	5066	U	2.84E-05	1.35E-05	2.14E-05	1.01E-05	2.00E-05	9.35E-05
Indiana	Allen County	3700	00337	-85.177704	41.035898	2837	U	3.83E-06	5.09E-05	1.42E-05	4.14E-06	1.99E-05	9.30E-05
Indiana	Marion Count	360201	0973602.01	-86.042079	39.819661	3953	U	2.26E-05	2.17E-05	2.29E-05	5.43E-06	1.99E-05	9.26E-05
Indiana	Lake County	12500	089125	-87.347446	41.57694	3763	U	1.97E-05	2.91E-05	1.68E-05	6.75E-06	1.99E-05	9.22E-05
Indiana	Elkhart Count	2800	03928	-85.971773	41.684574	715	R	1.09E-05	4.38E-05	1.46E-05	2.37E-06	2.01E-05	9.19E-05
Indiana	Marion Count	322000	0973220	-86.163852	39.828966	4014	U	2.20E-05	1.93E-05	2.42E-05	6.22E-06	1.99E-05	9.17E-05
Indiana	Lake County	41800	089418	-87.237492	41.569402	6874	U	2.44E-05	2.56E-05	1.27E-05	8.97E-06	1.99E-05	9.16E-05
Indiana	Allen County	2898	00328.98	-85.121574	41.0526	85	U	4.74E-06	4.58E-05	1.76E-05	4.66E-06	1.86E-05	9.14E-05
Indiana	Marion Count	350600	0973506	-86.095859	39.820216	6315	U	2.29E-05	1.40E-05	2.84E-05	6.00E-06	2.01E-05	9.14E-05
Indiana	Lake County	10298	089102.98	-87.262686	41.602328	6513	U	2.74E-05	2.68E-05	9.18E-06	8.02E-06	1.99E-05	9.13E-05
Indiana	Marion Count	330801	0973308.01	-86.003165	39.832624	8366	U	1.52E-05	1.74E-05	3.06E-05	7.85E-06	2.00E-05	9.11E-05
Indiana	Allen County	2900	00329	-85.106848	41.057152	3006	U	5.72E-06	4.92E-05	1.29E-05	3.33E-06	1.99E-05	9.10E-05
Indiana	Noble County	971800	1139718	-85.261475	41.442777	3645	R	4.12E-05	2.08E-05	7.39E-06	1.75E-06	2.00E-05	9.10E-05
Indiana	St. Joseph Co	100	1411	-86.301245	41.691478	2178	U	1.06E-05	3.57E-05	1.87E-05	5.68E-06	2.02E-05	9.09E-05
Indiana	Marion Count	360102	0973601.02	-86.075423	39.818003	3727	U	2.28E-05	1.61E-05	2.60E-05	5.82E-06	2.01E-05	9.08E-05
Indiana	Marion Count	320107	0973201.07	-86.155439	39.920867	1811	U	9.18E-06	2.59E-05	2.72E-05	8.04E-06	2.01E-05	9.05E-05
Indiana	Marion Count	380402	0973804.02	-86.094571	39.698891	4472	U	2.76E-05	1.37E-05	2.30E-05	6.00E-06	2.00E-05	9.03E-05
Indiana	Wayne Count	500	1775	-84.902656	39.838405	3999	U	3.41E-06	5.87E-05	6.57E-06	1.28E-06	2.02E-05	9.02E-05
Indiana	Marion Count	390100	0973901	-86.052288	39.707613	5855	U	2.88E-05	1.48E-05	2.07E-05	5.94E-06	1.98E-05	9.00E-05
Indiana	La Porte Cou	40200	091402	-86.896524	41.715475	2025	U	1.27E-05	4.59E-05	8.42E-06	2.71E-06	2.02E-05	8.99E-05
Indiana	Allen County	3200	00332	-85.144984	41.040325	5408	U	5.45E-06	4.81E-05	1.29E-05	3.34E-06	2.00E-05	8.98E-05
Indiana	Marion Count	322400	0973224	-86.132035	39.843902	3756	U	1.65E-05	1.45E-05	3.18E-05	7.06E-06	1.99E-05	8.97E-05
Indiana	Allen County	100	0031	-85.125552	41.102983	2694	U	4.70E-06	4.96E-05	1.20E-05	3.04E-06	2.00E-05	8.94E-05
Indiana	Johnson Cou	611000	0816110	-86.049859	39.480117	4259	U	1.56E-05	2.95E-05	1.63E-05	7.53E-06	2.04E-05	8.93E-05
Indiana	St. Joseph Co	400	1414	-86.280904	41.690308	2948	U	3.35E-06	3.49E-05	2.48E-05	6.17E-06	2.01E-05	8.93E-05
Indiana	Marion Count	322300	0973223	-86.14693	39.842876	2962	U	1.73E-05	1.36E-05	3.06E-05	7.11E-06	2.01E-05	8.87E-05
Indiana	Marion Count	350700	0973507	-86.108596	39.813751	2409	U	2.40E-05	1.55E-05	2.36E-05	5.77E-06	1.98E-05	8.86E-05
Indiana	Marion Count	380501	0973805.01	-86.122994	39.696857	2690	U	2.58E-05	1.30E-05	2.36E-05	6.12E-06	1.99E-05	8.84E-05
Indiana	Madison Cou	600	0956	-85.688024	40.09323	1927	U	4.24E-07	4.58E-05	1.89E-05	3.24E-06	2.00E-05	8.83E-05
Indiana	Marion Count	360401	0973604.01	-85.999776	39.804569	5656	U	2.21E-05	1.32E-05	2.69E-05	6.18E-06	1.99E-05	8.83E-05
Indiana	Elkhart Count	2600	03926	-85.967917	41.673293	4398	R	1.51E-05	3.20E-05	1.81E-05	2.68E-06	2.01E-05	8.80E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Marion Count	330900	0973309	-86.056313	39.834302	6050	U	1.77E-05	1.67E-05	2.74E-05	6.03E-06	2.01E-05	8.79E-05
Indiana	Marion Count	322200	0973222	-86.145761	39.835654	2360	U	1.93E-05	1.35E-05	2.89E-05	6.15E-06	2.00E-05	8.78E-05
Indiana	Lake County	10100	089101	-87.241181	41.61567	5499	U	2.53E-05	2.29E-05	1.09E-05	8.36E-06	2.00E-05	8.75E-05
Indiana	Allen County	3100	00331	-85.132079	41.044041	2970	U	1.23E-05	3.82E-05	1.31E-05	3.31E-06	2.03E-05	8.73E-05
Indiana	Marion Count	330500	0973305	-86.062488	39.847269	6842	U	1.53E-05	1.92E-05	2.70E-05	5.80E-06	2.00E-05	8.73E-05
Indiana	Bartholomew	10100	005101	-85.914176	39.208993	4983	R	2.67E-06	5.67E-05	6.69E-06	1.10E-06	2.00E-05	8.72E-05
Indiana	Marion Count	340400	0973404	-86.233355	39.814199	3675	U	2.18E-05	1.55E-05	2.38E-05	6.01E-06	2.00E-05	8.72E-05
Indiana	Marion Count	360301	0973603.01	-86.021712	39.803548	3900	U	2.20E-05	1.68E-05	2.30E-05	5.49E-06	1.99E-05	8.72E-05
Indiana	Lake County	10500	089105	-87.372143	41.60142	2768	U	2.08E-05	2.84E-05	1.23E-05	5.52E-06	1.99E-05	8.69E-05
Indiana	Jackson Cour	967800	0719678	-85.887844	38.953707	2630	R	2.56E-07	5.71E-05	7.91E-06	1.42E-06	2.01E-05	8.68E-05
Indiana	Marion Count	310106	0973101.06	-86.211434	39.904607	3171	U	9.84E-06	2.45E-05	2.53E-05	7.10E-06	2.00E-05	8.67E-05
Indiana	Marion Count	320105	0973201.05	-86.193346	39.918533	3678	U	9.87E-06	2.16E-05	2.80E-05	7.14E-06	2.00E-05	8.66E-05
Indiana	Marion Count	331000	0973310	-86.07341	39.832449	5369	U	1.94E-05	1.42E-05	2.74E-05	5.67E-06	1.98E-05	8.65E-05
Indiana	Marion Count	360405	0973604.05	-85.982623	39.804966	3388	U	1.95E-05	1.41E-05	2.57E-05	6.96E-06	2.01E-05	8.64E-05
Indiana	Lake County	41600	089416	-87.281071	41.556459	5316	U	1.99E-05	2.34E-05	1.60E-05	6.68E-06	2.00E-05	8.60E-05
Indiana	Marion Count	320203	0973202.03	-86.13731	39.922953	2857	U	7.90E-06	1.87E-05	3.07E-05	8.57E-06	1.99E-05	8.58E-05
Indiana	Lake County	10900	089109	-87.323075	41.598157	2842	U	2.27E-05	2.49E-05	1.27E-05	5.39E-06	2.00E-05	8.57E-05
Indiana	Lake County	11800	089118	-87.33951	41.591666	802	U	2.19E-05	2.36E-05	1.47E-05	5.48E-06	2.00E-05	8.57E-05
Indiana	Marion Count	340500	0973405	-86.213765	39.818401	4338	U	2.17E-05	1.47E-05	2.31E-05	5.98E-06	2.01E-05	8.57E-05
Indiana	Marion Count	340101	0973401.01	-86.318872	39.770607	4701	U	2.87E-05	1.14E-05	1.92E-05	6.12E-06	1.99E-05	8.55E-05
Indiana	Marion Count	322600	0973226	-86.111356	39.830564	4797	U	1.92E-05	1.37E-05	2.66E-05	5.95E-06	2.00E-05	8.54E-05
Indiana	Porter County	50402	127504.02	-87.172265	41.590576	9939	U	2.82E-05	2.16E-05	1.01E-05	5.40E-06	2.01E-05	8.54E-05
Indiana	Porter County	50500	127505	-87.176072	41.556561	29491	U	2.46E-05	2.76E-05	9.00E-06	4.20E-06	2.00E-05	8.54E-05
Indiana	Elkhart Count	198	0391.98	-85.832156	41.582117	3775	R	5.08E-06	3.60E-05	1.93E-05	4.83E-06	2.01E-05	8.53E-05
Indiana	Marion Count	340300	0973403	-86.248588	39.815771	7007	U	2.09E-05	1.35E-05	2.46E-05	6.20E-06	2.00E-05	8.52E-05
Indiana	Wayne Count	1000	17710	-84.886005	39.823871	5988	U	2.28E-06	5.33E-05	8.16E-06	1.38E-06	2.01E-05	8.52E-05
Indiana	Lake County	12300	089123	-87.337234	41.584447	855	U	2.04E-05	2.63E-05	1.32E-05	5.24E-06	2.00E-05	8.51E-05
Indiana	Lake County	10800	089108	-87.334759	41.601689	891	U	2.50E-05	2.24E-05	1.25E-05	5.03E-06	2.01E-05	8.50E-05
Indiana	Lake County	11400	089114	-87.366072	41.591632	1861	U	2.23E-05	1.92E-05	1.66E-05	6.65E-06	2.02E-05	8.50E-05
Indiana	Marion Count	350500	0973505	-86.122136	39.821298	3392	U	1.93E-05	1.40E-05	2.58E-05	5.82E-06	2.01E-05	8.50E-05
Indiana	Porter County	50300	127503	-87.093062	41.617936	4215	U	3.28E-05	1.95E-05	7.54E-06	4.91E-06	2.01E-05	8.48E-05
Indiana	Marion Count	360502	0973605.02	-85.995429	39.78681	4519	U	2.29E-05	1.32E-05	2.25E-05	6.04E-06	2.00E-05	8.47E-05
Indiana	Lake County	12600	089126	-87.361409	41.577305	945	U	2.03E-05	2.15E-05	1.51E-05	7.45E-06	2.01E-05	8.44E-05
Indiana	Marion Count	330802	0973308.02	-86.021599	39.833247	7350	U	1.65E-05	1.65E-05	2.56E-05	5.81E-06	2.00E-05	8.44E-05
Indiana	Lake County	21400	089214	-87.514063	41.595394	4223	U	1.74E-05	2.14E-05	1.81E-05	7.14E-06	2.02E-05	8.42E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Marion Count	321900	0973219	-86.165092	39.83923	5261	U	1.98E-05	1.23E-05	2.61E-05	5.99E-06	2.00E-05	8.42E-05
Indiana	Lake County	20300	089203	-87.516346	41.632976	4409	U	2.79E-05	1.58E-05	1.32E-05	7.02E-06	2.01E-05	8.41E-05
Indiana	Marion Count	330402	0973304.02	-86.050236	39.859842	2672	U	1.41E-05	1.60E-05	2.65E-05	6.96E-06	2.01E-05	8.38E-05
Indiana	Marion Count	361600	0973616	-85.982567	39.745561	2313	U	2.61E-05	1.11E-05	1.87E-05	7.81E-06	2.00E-05	8.38E-05
Indiana	Allen County	3303	00333.03	-85.13279	41.110666	1480	U	4.19E-06	4.43E-05	1.22E-05	3.12E-06	1.99E-05	8.37E-05
Indiana	Marion Count	330401	0973304.01	-86.055115	39.875289	5585	U	1.12E-05	1.78E-05	2.84E-05	6.08E-06	2.01E-05	8.36E-05
Indiana	Lake County	11900	089119	-87.33309	41.589837	685	U	2.05E-05	2.56E-05	1.21E-05	5.23E-06	2.01E-05	8.35E-05
Indiana	Marion Count	322700	0973227	-86.092682	39.831736	2911	U	1.88E-05	1.30E-05	2.57E-05	5.94E-06	2.00E-05	8.35E-05
Indiana	Allen County	3000	00330	-85.118357	41.049798	4184	U	4.59E-06	4.31E-05	1.23E-05	3.35E-06	2.01E-05	8.34E-05
Indiana	Marion Count	321800	0973218	-86.152187	39.849929	3936	U	1.65E-05	1.27E-05	2.82E-05	6.11E-06	1.99E-05	8.34E-05
Indiana	Allen County	3800	00338	-85.176734	41.017568	3346	U	2.72E-06	4.58E-05	1.12E-05	3.48E-06	2.01E-05	8.33E-05
Indiana	Lake County	11000	089110	-87.332231	41.597502	592	U	2.34E-05	2.11E-05	1.34E-05	5.30E-06	1.99E-05	8.31E-05
Indiana	La Porte Cou	42200	091422	-86.713875	41.596383	3317	U	8.70E-06	4.45E-05	7.34E-06	2.40E-06	2.01E-05	8.31E-05
Indiana	Marion Count	310305	0973103.05	-86.271967	39.838201	3197	U	1.29E-05	1.20E-05	3.05E-05	7.59E-06	2.00E-05	8.30E-05
Indiana	Lake County	11300	089113	-87.353369	41.599305	2082	U	2.30E-05	1.95E-05	1.48E-05	5.60E-06	2.00E-05	8.29E-05
Indiana	Marion Count	321300	0973213	-86.132918	39.865279	2603	U	1.44E-05	1.44E-05	2.79E-05	6.34E-06	1.99E-05	8.29E-05
Indiana	Marion Count	330103	0973301.03	-86.05751	39.922616	4473	U	1.88E-05	1.70E-05	2.15E-05	5.45E-06	2.00E-05	8.28E-05
Indiana	Marion Count	370100	0973701	-86.277911	39.696605	2520	U	1.79E-05	1.16E-05	2.01E-05	1.31E-05	1.99E-05	8.27E-05
Indiana	Marion Count	330106	0973301.06	-86.040821	39.900427	4192	U	8.12E-06	1.42E-05	3.32E-05	7.09E-06	1.99E-05	8.25E-05
Indiana	St. Joseph Co	500	1415	-86.283228	41.685361	2129	U	3.22E-06	3.15E-05	2.23E-05	5.43E-06	2.01E-05	8.25E-05
Indiana	Lake County	13300	089133	-87.324603	41.541623	3277	U	1.68E-05	2.35E-05	1.62E-05	5.84E-06	2.00E-05	8.24E-05
Indiana	Marion Count	340200	0973402	-86.260696	39.808359	7276	U	1.85E-05	1.19E-05	2.57E-05	6.39E-06	1.99E-05	8.23E-05
Indiana	Allen County	3400	00334	-85.109794	41.102275	4588	U	4.27E-06	4.10E-05	1.36E-05	3.32E-06	1.99E-05	8.22E-05
Indiana	Lake County	10400	089104	-87.384669	41.592971	3917	U	2.11E-05	2.26E-05	1.28E-05	5.67E-06	2.00E-05	8.22E-05
Indiana	Allen County	3901	00339.01	-85.161095	41.019861	3629	U	2.98E-06	3.99E-05	1.47E-05	4.39E-06	2.01E-05	8.20E-05
Indiana	Allen County	4000	00340	-85.10493	41.040704	3896	U	7.24E-06	3.71E-05	1.39E-05	3.72E-06	2.00E-05	8.20E-05
Indiana	Bartholomew	10400	005104	-85.897631	39.238292	3184	R	2.93E-06	5.23E-05	4.92E-06	1.51E-06	2.03E-05	8.20E-05
Indiana	Porter County	50200	127502	-87.056079	41.611117	11434	U	2.95E-05	1.88E-05	7.93E-06	5.70E-06	2.01E-05	8.20E-05
Indiana	Vigo County	800	1678	-87.410285	39.45747	3965	U	6.97E-07	4.81E-05	1.16E-05	1.67E-06	2.00E-05	8.20E-05
Indiana	Marion Count	320700	0973207	-86.148542	39.875726	1840	U	1.49E-05	1.59E-05	2.52E-05	5.77E-06	2.00E-05	8.18E-05
Indiana	Lake County	11100	089111	-87.340966	41.59995	613	U	2.31E-05	1.91E-05	1.40E-05	5.43E-06	2.00E-05	8.17E-05
Indiana	Marion Count	360404	0973604.04	-85.98116	39.818985	4769	U	1.73E-05	1.34E-05	2.38E-05	7.15E-06	1.99E-05	8.16E-05
Indiana	Lake County	20500	089205	-87.501108	41.614203	4521	U	1.94E-05	1.83E-05	1.67E-05	7.36E-06	1.98E-05	8.15E-05
Indiana	Porter County	50401	127504.01	-87.192589	41.623955	1499	U	2.52E-05	2.25E-05	8.61E-06	5.28E-06	1.99E-05	8.15E-05
Indiana	Marion Count	310105	0973101.05	-86.229184	39.903631	3222	U	8.26E-06	2.60E-05	2.09E-05	6.16E-06	1.99E-05	8.12E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Marion Count	330105	0973301.05	-86.055096	39.895701	5156	U	1.08E-05	1.33E-05	3.05E-05	6.30E-06	2.02E-05	8.12E-05
Indiana	Lake County	10600	089106	-87.36277	41.602327	4043	U	2.12E-05	2.03E-05	1.38E-05	5.91E-06	2.00E-05	8.11E-05
Indiana	Marion Count	380700	0973807	-86.154439	39.685903	4602	U	1.70E-05	1.47E-05	2.30E-05	6.41E-06	2.00E-05	8.10E-05
Indiana	Lake County	21500	089215	-87.521865	41.59633	4273	U	1.73E-05	1.83E-05	1.82E-05	7.30E-06	1.98E-05	8.08E-05
Indiana	Bartholomew	10200	005102	-85.91221	39.220976	4540	R	3.73E-06	4.92E-05	6.62E-06	1.11E-06	2.01E-05	8.07E-05
Indiana	Lake County	11200	089112	-87.345932	41.599712	1364	U	2.34E-05	1.94E-05	1.29E-05	5.19E-06	1.99E-05	8.07E-05
Indiana	Marion Count	340900	0973409	-86.266483	39.787569	7194	U	2.21E-05	1.27E-05	1.97E-05	6.13E-06	2.01E-05	8.07E-05
Indiana	Lake County	12400	089124	-87.348934	41.584045	1988	U	2.08E-05	2.09E-05	1.37E-05	5.40E-06	1.98E-05	8.06E-05
Indiana	Marion Count	321200	0973212	-86.149328	39.861545	5206	U	1.42E-05	1.25E-05	2.80E-05	6.00E-06	2.00E-05	8.06E-05
Indiana	Marion Count	321700	0973217	-86.132303	39.854384	4431	U	1.46E-05	1.33E-05	2.67E-05	5.87E-06	2.01E-05	8.06E-05
Indiana	St. Joseph Co	2200	14122	-86.281416	41.669077	2978	U	3.09E-06	3.40E-05	1.85E-05	5.14E-06	2.00E-05	8.06E-05
Indiana	Marion Count	340108	0973401.08	-86.272351	39.813913	3205	U	1.50E-05	1.27E-05	2.57E-05	6.94E-06	2.00E-05	8.04E-05
Indiana	Lake County	13000	089130	-87.327783	41.552384	4940	U	1.78E-05	2.59E-05	1.13E-05	5.34E-06	1.98E-05	8.02E-05
Indiana	Lake County	42100	089421	-87.278857	41.546252	5364	U	1.90E-05	1.94E-05	1.52E-05	6.45E-06	2.00E-05	8.01E-05
Indiana	Lake County	11700	089117	-87.347761	41.590757	1753	U	2.17E-05	2.07E-05	1.25E-05	5.16E-06	2.00E-05	8.00E-05
Indiana	Marion Count	321002	0973210.02	-86.20542	39.837136	4237	U	1.67E-05	1.18E-05	2.53E-05	6.19E-06	2.00E-05	8.00E-05
Indiana	Marion Count	322500	0973225	-86.130307	39.83651	2212	U	1.69E-05	1.32E-05	2.40E-05	6.02E-06	1.98E-05	8.00E-05
Indiana	St. Joseph Co	2700	14127	-86.267843	41.666044	1423	U	2.55E-06	3.74E-05	1.53E-05	4.48E-06	2.03E-05	8.00E-05
Indiana	Johnson Cou	611100	0816111	-86.032284	39.478418	2363	U	1.50E-05	2.63E-05	1.26E-05	6.22E-06	1.98E-05	7.99E-05
Indiana	Elkhart Count	1897	03918.97	-85.943114	41.701585	112	R	1.21E-05	3.00E-05	1.47E-05	2.77E-06	2.00E-05	7.97E-05
Indiana	Marion Count	360402	0973604.02	-86.002928	39.821351	2198	U	1.76E-05	1.48E-05	2.15E-05	5.70E-06	2.00E-05	7.97E-05
Indiana	Marion Count	380800	0973808	-86.125837	39.68632	2911	U	2.00E-05	1.20E-05	2.19E-05	5.77E-06	2.00E-05	7.97E-05
Indiana	Marion Count	321600	0973216	-86.102254	39.847223	4356	U	1.58E-05	1.31E-05	2.49E-05	5.73E-06	2.00E-05	7.95E-05
Indiana	Allen County	3500	00335	-85.098067	41.097052	3913	U	3.61E-06	4.07E-05	1.17E-05	3.09E-06	2.02E-05	7.93E-05
Indiana	Madison Cou	400	0954	-85.70077	40.105269	2988	U	1.17E-06	3.88E-05	1.62E-05	3.04E-06	2.00E-05	7.93E-05
Indiana	Jackson Cou	967900	0719679	-85.88403	38.94832	6303	R	3.64E-07	5.07E-05	6.99E-06	1.08E-06	2.01E-05	7.92E-05
Indiana	Lake County	20900	089209	-87.469323	41.593537	3526	U	1.77E-05	2.41E-05	1.19E-05	5.30E-06	1.99E-05	7.89E-05
Indiana	Marion Count	360501	0973605.01	-85.962932	39.783311	4597	U	2.13E-05	1.22E-05	2.02E-05	5.22E-06	2.00E-05	7.89E-05
Indiana	Lake County	13100	089131	-87.346217	41.550459	6344	U	1.63E-05	2.46E-05	1.25E-05	5.18E-06	2.01E-05	7.87E-05
Indiana	Bartholomew	10500	005105	-85.879438	39.227544	4314	R	2.91E-06	4.48E-05	8.47E-06	2.06E-06	2.00E-05	7.83E-05
Indiana	Johnson Cou	610300	0816103	-86.108791	39.616268	4088	U	1.28E-05	1.60E-05	2.16E-05	7.89E-06	2.00E-05	7.83E-05
Indiana	Lake County	20400	089204	-87.503119	41.626029	4342	U	2.01E-05	1.73E-05	1.39E-05	6.85E-06	2.01E-05	7.83E-05
Indiana	La Porte Cou	42500	091425	-86.751112	41.621812	4620	U	9.41E-06	4.07E-05	5.95E-06	2.08E-06	2.01E-05	7.82E-05
Indiana	Marion Count	320800	0973208	-86.155438	39.897158	3172	U	1.03E-05	1.51E-05	2.60E-05	6.50E-06	2.00E-05	7.80E-05
Indiana	Marion Count	381203	0973812.03	-86.122135	39.646907	2231	U	1.30E-05	1.23E-05	2.56E-05	6.84E-06	2.00E-05	7.78E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Wayne Count	100	1771	-84.883638	39.829041	1029	U	2.18E-06	3.92E-05	1.41E-05	2.20E-06	2.01E-05	7.78E-05
Indiana	Lake County	11600	089116	-87.365532	41.584625	4632	U	2.07E-05	1.87E-05	1.29E-05	5.42E-06	2.00E-05	7.77E-05
Indiana	Marion Count	330300	0973303	-86.016688	39.857731	1680	U	1.17E-05	2.00E-05	2.01E-05	7.15E-06	1.86E-05	7.76E-05
Indiana	Marion Count	381101	0973811.01	-86.157772	39.670098	4703	U	1.32E-05	1.17E-05	2.57E-05	7.22E-06	1.99E-05	7.76E-05
Indiana	Marion Count	321400	0973214	-86.105532	39.860841	4774	U	1.37E-05	1.23E-05	2.55E-05	5.70E-06	2.03E-05	7.75E-05
Indiana	Lake County	41302	089413.02	-87.382466	41.543023	3263	U	1.48E-05	1.94E-05	1.55E-05	7.64E-06	2.00E-05	7.74E-05
Indiana	Marion Count	321100	0973211	-86.179663	39.855996	3747	U	1.56E-05	1.23E-05	2.31E-05	6.12E-06	2.01E-05	7.72E-05
Indiana	Wabash Cour	992600	1699926	-85.814329	40.804547	3971	U	4.66E-05	4.51E-06	4.63E-06	1.24E-06	2.01E-05	7.71E-05
Indiana	Allen County	11303	003113.03	-85.090215	41.046735	1991	U	6.45E-06	3.86E-05	9.42E-06	2.66E-06	1.99E-05	7.70E-05
Indiana	Lake County	20600	089206	-87.514215	41.617087	3247	U	1.84E-05	1.72E-05	1.47E-05	6.64E-06	2.00E-05	7.70E-05
Indiana	Fayette Coun	954100	0419541	-85.131898	39.672147	3028	U	1.49E-06	4.90E-05	5.15E-06	1.07E-06	2.01E-05	7.69E-05
Indiana	Marion Count	381102	0973811.02	-86.160382	39.656964	4902	U	1.28E-05	1.12E-05	2.58E-05	7.09E-06	2.00E-05	7.69E-05
Indiana	Marion Count	320901	0973209.01	-86.17532	39.884646	5764	U	1.21E-05	1.37E-05	2.51E-05	5.84E-06	2.00E-05	7.68E-05
Indiana	Marion Count	390200	0973902	-85.994156	39.709251	1728	U	2.21E-05	1.02E-05	1.72E-05	7.31E-06	1.99E-05	7.67E-05
Indiana	Marion Count	310306	0973103.06	-86.262102	39.83071	5993	U	1.56E-05	1.10E-05	2.42E-05	6.01E-06	1.98E-05	7.66E-05
Indiana	Marion Count	320600	0973206	-86.127672	39.881425	3084	U	1.22E-05	1.24E-05	2.57E-05	5.80E-06	2.01E-05	7.62E-05
Indiana	Lake County	20700	089207	-87.510014	41.606465	4433	U	1.91E-05	1.66E-05	1.43E-05	6.20E-06	2.00E-05	7.61E-05
Indiana	Posey County	40600	129406	-87.905076	37.937364	3990	U	1.97E-05	2.87E-05	5.72E-06	1.89E-06	2.00E-05	7.60E-05
Indiana	Allen County	2300	00323	-85.119765	41.03818	5484	U	4.16E-06	3.57E-05	1.24E-05	3.44E-06	2.01E-05	7.58E-05
Indiana	Lake County	41301	089413.01	-87.392179	41.552228	2395	U	1.55E-05	1.99E-05	1.35E-05	6.89E-06	1.99E-05	7.57E-05
Indiana	La Porte Cou	40900	091409	-86.876155	41.714065	3217	U	1.09E-05	3.44E-05	7.82E-06	2.55E-06	2.00E-05	7.57E-05
Indiana	Marion Count	320304	0973203.04	-86.08263	39.895651	5664	U	1.01E-05	1.29E-05	2.69E-05	5.75E-06	2.01E-05	7.57E-05
Indiana	Marion Count	320400	0973204	-86.083117	39.874649	3404	U	1.13E-05	1.30E-05	2.59E-05	5.59E-06	1.99E-05	7.57E-05
Indiana	Marion Count	320301	0973203.01	-86.107349	39.891389	3515	U	1.15E-05	1.23E-05	2.57E-05	5.86E-06	2.01E-05	7.55E-05
Indiana	Marion Count	390400	0973904	-86.061126	39.674995	10126	U	1.93E-05	1.16E-05	1.93E-05	5.39E-06	1.98E-05	7.54E-05
Indiana	Allen County	3902	00339.02	-85.155346	41.010998	2752	U	2.62E-06	3.44E-05	1.40E-05	4.28E-06	2.00E-05	7.52E-05
Indiana	Madison Cou	100	0951	-85.675718	40.103708	371	U	1.11E-06	3.76E-05	1.36E-05	2.63E-06	2.00E-05	7.49E-05
Indiana	Marion Count	381002	0973810.02	-86.125225	39.671567	3156	U	1.64E-05	1.17E-05	2.10E-05	5.57E-06	2.01E-05	7.46E-05
Indiana	Lake County	11500	089115	-87.384425	41.580773	5189	U	1.93E-05	1.64E-05	1.34E-05	5.67E-06	1.99E-05	7.45E-05
Indiana	Marion Count	330202	0973302.02	-85.982716	39.834164	3287	U	1.55E-05	1.33E-05	1.96E-05	5.98E-06	2.00E-05	7.44E-05
Indiana	Bartholomew	10600	005106	-85.866511	39.224549	4240	R	3.20E-06	4.09E-05	8.23E-06	1.94E-06	2.00E-05	7.43E-05
Indiana	Madison Cou	200	0952	-85.685991	40.105553	1488	U	5.01E-07	3.29E-05	1.79E-05	3.07E-06	2.00E-05	7.43E-05
Indiana	Marion Count	310303	0973103.03	-86.248131	39.860939	5213	U	1.17E-05	1.04E-05	2.54E-05	6.86E-06	1.99E-05	7.43E-05
Indiana	Lake County	41900	089419	-87.240251	41.53929	4431	U	2.04E-05	1.77E-05	1.12E-05	4.93E-06	2.00E-05	7.42E-05
Indiana	Marion Count	320109	0973201.09	-86.176984	39.905253	2685	U	8.60E-06	1.60E-05	2.34E-05	6.20E-06	2.01E-05	7.42E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Marion Count	320108	0973201.08	-86.191736	39.903301	4983	U	8.05E-06	1.57E-05	2.42E-05	6.13E-06	1.99E-05	7.41E-05
Indiana	Marion Count	320106	0973201.06	-86.176074	39.91934	2321	U	7.38E-06	1.72E-05	2.32E-05	6.14E-06	2.01E-05	7.40E-05
Indiana	Dubois Count	953400	0379534	-86.930937	38.384798	4635	R	2.08E-05	2.67E-05	4.96E-06	1.16E-06	2.02E-05	7.38E-05
Indiana	Marion Count	320204	0973202.04	-86.12466	39.918558	3254	U	8.65E-06	1.58E-05	2.32E-05	6.13E-06	2.00E-05	7.38E-05
Indiana	Marion Count	320903	0973209.03	-86.197104	39.878233	4216	U	1.03E-05	1.29E-05	2.44E-05	6.04E-06	2.01E-05	7.38E-05
Indiana	Marion Count	330107	0973301.07	-86.023162	39.893211	5303	U	9.89E-06	1.17E-05	2.64E-05	5.96E-06	1.99E-05	7.38E-05
Indiana	Marion Count	380900	0973809	-86.101675	39.669818	6457	U	1.66E-05	1.06E-05	2.07E-05	5.54E-06	2.02E-05	7.37E-05
Indiana	Lake County	41200	089412	-87.395491	41.570185	1168	U	1.69E-05	1.66E-05	1.29E-05	7.16E-06	2.00E-05	7.36E-05
Indiana	Elkhart Count	1900	03919	-85.934317	41.675411	8228	R	1.32E-05	2.48E-05	1.29E-05	2.56E-06	2.00E-05	7.35E-05
Indiana	Marion Count	320202	0973202.02	-86.13218	39.898873	3906	U	8.97E-06	1.25E-05	2.59E-05	6.27E-06	1.99E-05	7.35E-05
Indiana	Marion Count	381001	0973810.01	-86.124561	39.657043	6523	U	1.30E-05	1.18E-05	2.26E-05	5.84E-06	2.02E-05	7.35E-05
Indiana	Johnson Cou	610202	0816102.02	-86.087425	39.607328	3742	U	1.32E-05	1.77E-05	1.61E-05	6.44E-06	2.00E-05	7.34E-05
Indiana	Wabash Cou	992700	1699927	-85.831263	40.807442	4722	U	3.91E-05	6.20E-06	6.31E-06	1.66E-06	2.01E-05	7.34E-05
Indiana	Fayette Coun	954400	0419544	-85.139149	39.646868	5778	U	2.97E-06	4.22E-05	6.76E-06	1.35E-06	2.00E-05	7.33E-05
Indiana	Marion Count	381201	0973812.01	-86.158476	39.642925	5766	U	1.06E-05	1.13E-05	2.45E-05	6.93E-06	1.99E-05	7.33E-05
Indiana	Vigo County	1800	16718	-87.406906	39.447068	2941	U	6.82E-07	3.60E-05	1.46E-05	2.00E-06	2.00E-05	7.33E-05
Indiana	St. Joseph Co	3000	14130	-86.242682	41.654281	2601	U	1.98E-06	2.71E-05	1.94E-05	4.56E-06	2.02E-05	7.32E-05
Indiana	Allen County	11502	003115.02	-85.207273	41.047	2567	U	3.23E-06	3.78E-05	9.09E-06	2.87E-06	2.01E-05	7.31E-05
Indiana	Marion Count	321001	0973210.01	-86.201728	39.862243	3054	U	1.27E-05	1.15E-05	2.31E-05	5.76E-06	2.00E-05	7.30E-05
Indiana	Allen County	3302	00333.02	-85.13401	41.127859	3108	U	3.14E-06	3.61E-05	1.07E-05	2.89E-06	2.01E-05	7.29E-05
Indiana	Lake County	13200	089132	-87.34359	41.538983	5606	U	1.47E-05	1.98E-05	1.34E-05	5.19E-06	1.98E-05	7.29E-05
Indiana	Lake County	21700	089217	-87.497679	41.576704	3720	U	1.55E-05	1.59E-05	1.50E-05	6.44E-06	2.00E-05	7.29E-05
Indiana	Lake County	21300	089213	-87.494356	41.58626	5609	U	1.63E-05	1.83E-05	1.28E-05	5.75E-06	1.97E-05	7.28E-05
Indiana	Hamilton Cou	111102	0571111.02	-86.152775	39.93496	5468	U	7.80E-06	2.32E-05	1.64E-05	5.16E-06	1.99E-05	7.25E-05
Indiana	Marion Count	330201	0973302.01	-85.96313	39.891162	9497	U	1.01E-05	1.06E-05	2.61E-05	5.65E-06	2.01E-05	7.25E-05
Indiana	La Porte Cou	41000	091410	-86.888165	41.72569	1521	U	2.13E-05	2.40E-05	5.09E-06	1.86E-06	2.01E-05	7.23E-05
Indiana	Allen County	11201	003112.01	-85.058868	41.0662	2414	U	2.99E-06	3.68E-05	9.60E-06	2.64E-06	2.01E-05	7.22E-05
Indiana	Marion Count	320500	0973205	-86.11309	39.876585	3320	U	1.20E-05	1.11E-05	2.38E-05	5.57E-06	1.98E-05	7.22E-05
Indiana	Fayette Coun	954500	0419545	-85.138834	39.636862	3563	U	1.96E-06	4.22E-05	6.44E-06	1.32E-06	2.01E-05	7.20E-05
Indiana	St. Joseph Co	10500	141105	-86.121488	41.662895	2980	U	2.79E-06	2.87E-05	1.65E-05	4.04E-06	2.00E-05	7.20E-05
Indiana	Porter County	51004	127510.04	-87.181022	41.405743	7300	U	3.42E-05	8.06E-06	6.26E-06	3.25E-06	2.01E-05	7.19E-05
Indiana	Lake County	41500	089415	-87.353059	41.528188	1927	U	1.35E-05	1.71E-05	1.53E-05	5.63E-06	2.01E-05	7.17E-05
Indiana	Shelby Count	710600	1457106	-85.779303	39.521066	8907	U	1.67E-05	1.69E-05	1.44E-05	3.80E-06	1.99E-05	7.17E-05
Indiana	Allen County	4101	00341.01	-85.106663	41.143339	2197	U	2.43E-06	3.44E-05	1.16E-05	3.16E-06	2.00E-05	7.16E-05
Indiana	Marion Count	310304	0973103.04	-86.233623	39.843375	5427	U	1.30E-05	1.03E-05	2.24E-05	5.83E-06	2.00E-05	7.15E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Porter County	50800	127508	-87.049349	41.471999	5411	U	1.85E-05	1.69E-05	1.16E-05	4.53E-06	2.01E-05	7.15E-05
Indiana	Wayne Count	900	1779	-84.886496	39.811431	6203	U	1.86E-06	4.25E-05	5.82E-06	1.12E-06	2.02E-05	7.15E-05
Indiana	Marion Count	310104	0973101.04	-86.213091	39.920355	3223	U	7.65E-06	1.89E-05	1.91E-05	5.84E-06	1.99E-05	7.14E-05
Indiana	Marion Count	381204	0973812.04	-86.121306	39.640289	2771	U	1.29E-05	1.20E-05	2.07E-05	5.75E-06	2.00E-05	7.14E-05
Indiana	Lake County	13400	089134	-87.331219	41.528732	7410	U	1.54E-05	1.77E-05	1.31E-05	4.97E-06	2.00E-05	7.12E-05
Indiana	Allen County	3600	00336	-85.133081	41.024687	4509	U	3.21E-06	3.48E-05	1.02E-05	2.87E-06	2.01E-05	7.11E-05
Indiana	Marion Count	340105	0973401.05	-86.319261	39.795391	4546	U	1.66E-05	9.42E-06	1.87E-05	6.04E-06	2.02E-05	7.10E-05
Indiana	Allen County	3301	00333.01	-85.127405	41.137983	2931	U	2.75E-06	3.26E-05	1.23E-05	3.15E-06	2.00E-05	7.09E-05
Indiana	Johnson Cou	610201	0816102.01	-86.099668	39.625753	4959	U	1.23E-05	1.40E-05	1.78E-05	6.84E-06	2.00E-05	7.09E-05
Indiana	Floyd County	70902	043709.02	-85.814288	38.3096	1784	U	2.69E-06	2.74E-05	1.62E-05	4.16E-06	2.01E-05	7.06E-05
Indiana	Johnson Cou	610603	0816106.03	-86.182895	39.621684	5235	U	1.33E-05	1.23E-05	1.80E-05	6.91E-06	2.01E-05	7.06E-05
Indiana	Marion Count	320902	0973209.02	-86.193082	39.890909	3557	U	9.50E-06	1.20E-05	2.31E-05	5.92E-06	1.99E-05	7.04E-05
Indiana	Marion Count	340106	0973401.06	-86.299614	39.804839	5209	U	1.31E-05	1.08E-05	2.01E-05	6.38E-06	2.00E-05	7.04E-05
Indiana	Marion Count	380100	0973801	-86.190217	39.657894	5645	U	1.79E-05	9.66E-06	1.68E-05	5.94E-06	2.00E-05	7.04E-05
Indiana	Vanderburgh	202	1632.02	-87.521994	37.987064	2309	U	9.17E-07	3.15E-05	1.45E-05	3.48E-06	2.00E-05	7.04E-05
Indiana	Marion Count	320303	0973203.03	-86.076474	39.919407	2723	U	9.97E-06	1.35E-05	2.15E-05	5.32E-06	2.01E-05	7.03E-05
Indiana	Lake County	43300	089433	-87.23688	41.40343	4982	U	2.92E-05	8.40E-06	7.94E-06	4.87E-06	1.98E-05	7.02E-05
Indiana	Allen County	10805	003108.05	-85.075974	41.105169	6348	U	2.45E-06	2.95E-05	1.43E-05	3.67E-06	2.01E-05	7.01E-05
Indiana	Lake County	42200	089422	-87.286738	41.531041	6969	U	1.68E-05	1.63E-05	1.18E-05	5.32E-06	1.99E-05	7.01E-05
Indiana	Lake County	21000	089210	-87.447069	41.594169	9258	U	1.68E-05	1.69E-05	1.11E-05	5.10E-06	2.00E-05	6.99E-05
Indiana	Lake County	10300	089103	-87.403434	41.595117	9575	U	1.95E-05	1.49E-05	1.04E-05	4.91E-06	2.00E-05	6.98E-05
Indiana	Lake County	21600	089216	-87.510496	41.579964	4452	U	1.56E-05	1.51E-05	1.29E-05	6.39E-06	1.99E-05	6.98E-05
Indiana	Marion Count	381205	0973812.05	-86.106849	39.644091	4223	U	1.34E-05	1.26E-05	1.85E-05	5.39E-06	2.00E-05	6.98E-05
Indiana	St. Joseph Co	1700	14117	-86.244822	41.669248	777	U	2.26E-06	2.74E-05	1.64E-05	3.64E-06	2.01E-05	6.98E-05
Indiana	Marion Count	390300	0973903	-85.983376	39.667632	3824	U	1.80E-05	9.97E-06	1.54E-05	5.95E-06	2.01E-05	6.95E-05
Indiana	Allen County	11302	003113.02	-85.101027	41.02803	5265	U	3.27E-06	2.95E-05	1.29E-05	3.50E-06	2.02E-05	6.94E-05
Indiana	Hamilton Cou	111006	0571110.06	-86.137779	39.947026	3027	U	8.19E-06	1.68E-05	1.81E-05	6.18E-06	2.01E-05	6.94E-05
Indiana	Allen County	11202	003112.02	-85.038629	41.060704	2898	U	2.52E-06	3.55E-05	8.32E-06	2.51E-06	2.02E-05	6.91E-05
Indiana	Madison Cou	500	0955	-85.703094	40.092517	4047	U	2.03E-07	3.30E-05	1.33E-05	2.55E-06	2.00E-05	6.90E-05
Indiana	St. Joseph Co	1900	14119	-86.263135	41.679177	2042	U	2.45E-06	2.55E-05	1.67E-05	4.30E-06	2.00E-05	6.90E-05
Indiana	Allen County	11601	003116.01	-85.248177	41.071004	3509	U	3.25E-06	3.38E-05	9.11E-06	2.67E-06	2.00E-05	6.89E-05
Indiana	Allen County	4102	00341.02	-85.110005	41.125892	4708	U	2.86E-06	3.23E-05	1.06E-05	2.92E-06	2.01E-05	6.87E-05
Indiana	Kosciusko Co	962100	0859621	-85.812037	41.22627	5984	R	2.84E-05	1.05E-05	6.34E-06	3.48E-06	2.00E-05	6.87E-05
Indiana	Lake County	21100	089211	-87.446926	41.579174	7969	U	1.62E-05	1.48E-05	1.24E-05	5.54E-06	1.98E-05	6.87E-05
Indiana	Johnson Cou	610402	0816104.02	-86.115694	39.600683	4500	U	1.25E-05	1.37E-05	1.61E-05	6.25E-06	1.99E-05	6.84E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Vigo County	1700	16717	-87.391721	39.444374	4092	U	6.10E-07	3.37E-05	1.26E-05	1.70E-06	1.99E-05	6.84E-05
Indiana	Johnson Cou	610401	0816104.01	-86.129581	39.625371	5721	U	1.21E-05	1.30E-05	1.77E-05	5.57E-06	1.99E-05	6.83E-05
Indiana	Marion Count	370300	0973703	-86.274449	39.668057	7555	U	1.60E-05	9.32E-06	1.58E-05	7.24E-06	1.99E-05	6.83E-05
Indiana	Marion Count	330104	0973301.04	-86.009344	39.915145	8055	U	7.64E-06	1.03E-05	2.50E-05	5.31E-06	1.99E-05	6.81E-05
Indiana	Floyd County	70200	043702	-85.802399	38.294146	2118	U	3.94E-06	2.47E-05	1.53E-05	4.11E-06	2.00E-05	6.80E-05
Indiana	Lake County	21800	089218	-87.488068	41.574097	3047	U	1.49E-05	1.48E-05	1.27E-05	5.73E-06	1.98E-05	6.80E-05
Indiana	Miami County	952400	1039524	-86.060915	40.75739	3469	R	2.42E-06	3.47E-05	9.12E-06	1.52E-06	2.02E-05	6.80E-05
Indiana	Allen County	10701	003107.01	-85.164549	41.148045	3705	U	2.63E-06	2.97E-05	1.23E-05	3.02E-06	2.01E-05	6.78E-05
Indiana	Lake County	42000	089420	-87.257188	41.521629	4535	U	1.83E-05	1.39E-05	1.05E-05	5.14E-06	2.00E-05	6.78E-05
Indiana	St. Joseph Co	2800	14128	-86.277687	41.653944	1533	U	2.96E-06	2.55E-05	1.47E-05	4.58E-06	2.01E-05	6.78E-05
Indiana	Lake County	21200	089212	-87.469204	41.582244	2993	U	1.70E-05	1.42E-05	1.14E-05	5.42E-06	1.97E-05	6.77E-05
Indiana	Lake County	41000	089410	-87.420817	41.543837	10506	U	1.41E-05	1.63E-05	1.17E-05	5.63E-06	1.98E-05	6.75E-05
Indiana	Marion Count	310107	0973101.07	-86.295035	39.836153	7209	U	1.09E-05	1.00E-05	2.07E-05	5.61E-06	2.02E-05	6.74E-05
Indiana	Allen County	10702	003107.02	-85.131713	41.155142	5951	U	2.41E-06	2.98E-05	1.19E-05	3.07E-06	2.01E-05	6.72E-05
Indiana	Lake County	41100	089411	-87.415885	41.572568	3986	U	1.61E-05	1.46E-05	1.15E-05	5.01E-06	1.99E-05	6.72E-05
Indiana	Porter County	50900	127509	-87.051384	41.465307	4973	U	1.86E-05	1.37E-05	1.06E-05	4.30E-06	2.01E-05	6.72E-05
Indiana	Tippecanoe C	5400	15754	-86.910137	40.426969	6562	U	3.02E-06	1.39E-05	2.42E-05	5.86E-06	2.02E-05	6.72E-05
Indiana	Vigo County	100	1671	-87.40969	39.465416	360	U	5.35E-07	3.70E-05	1.15E-05	1.32E-06	1.68E-05	6.71E-05
Indiana	Elkhart Count	2298	03922.98	-85.97771	41.6564	6936	R	6.85E-06	2.16E-05	1.55E-05	2.94E-06	2.01E-05	6.70E-05
Indiana	Floyd County	70802	043708.02	-85.830438	38.317291	4095	U	2.19E-06	2.24E-05	1.81E-05	4.29E-06	2.00E-05	6.70E-05
Indiana	Vigo County	10500	167105	-87.447776	39.46307	2955	U	5.19E-07	3.59E-05	8.93E-06	1.64E-06	2.01E-05	6.70E-05
Indiana	Marion Count	340107	0973401.07	-86.287543	39.816727	3803	U	1.09E-05	9.58E-06	2.05E-05	6.05E-06	1.99E-05	6.69E-05
Indiana	Elkhart Count	1898	03918.98	-85.920617	41.710938	8570	R	1.22E-05	1.92E-05	1.24E-05	2.86E-06	2.02E-05	6.68E-05
Indiana	Vanderburgh	2200	16322	-87.542812	37.983818	1449	U	1.66E-06	2.53E-05	1.62E-05	3.60E-06	2.01E-05	6.68E-05
Indiana	Vanderburgh	2900	16329	-87.607449	37.973039	1228	U	9.45E-07	2.74E-05	1.53E-05	3.14E-06	1.98E-05	6.67E-05
Indiana	Lake County	40800	089408	-87.448129	41.545869	8287	U	1.47E-05	1.38E-05	1.31E-05	5.09E-06	2.00E-05	6.66E-05
Indiana	Porter County	50600	127506	-87.07133	41.481567	9324	U	2.00E-05	1.45E-05	8.33E-06	3.83E-06	2.00E-05	6.66E-05
Indiana	Vigo County	10800	167108	-87.429559	39.389038	5358	U	5.73E-07	3.37E-05	1.03E-05	1.91E-06	2.01E-05	6.66E-05
Indiana	Lake County	40700	089407	-87.450472	41.561693	5243	U	1.57E-05	1.35E-05	1.21E-05	5.21E-06	2.01E-05	6.65E-05
Indiana	Clark County	50100	019501	-85.740993	38.272664	1473	U	3.16E-06	2.16E-05	1.65E-05	4.90E-06	2.02E-05	6.64E-05
Indiana	Floyd County	70400	043704	-85.811896	38.291116	3202	U	3.69E-06	1.92E-05	1.90E-05	4.46E-06	2.00E-05	6.64E-05
Indiana	Bartholomew	10300	005103	-85.917497	39.242701	3067	R	3.06E-06	3.33E-05	7.70E-06	2.05E-06	2.01E-05	6.62E-05
Indiana	St. Joseph Co	800	1418	-86.251818	41.69119	1934	U	2.15E-06	2.20E-05	1.75E-05	4.44E-06	2.00E-05	6.62E-05
Indiana	Floyd County	70302	043703.02	-85.80458	38.301374	3667	U	3.19E-06	2.15E-05	1.71E-05	4.26E-06	2.00E-05	6.60E-05
Indiana	Lake County	41400	089414	-87.385742	41.530488	3385	U	1.37E-05	1.50E-05	1.18E-05	5.58E-06	1.99E-05	6.60E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
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Indiana	Johnson Cou	610100	0816101	-86.058974	39.580535	4075	U	1.22E-05	1.80E-05	1.11E-05	4.57E-06	2.00E-05	6.59E-05
Indiana	Clark County	50401	019504.01	-85.764388	38.285007	3324	U	3.06E-06	2.07E-05	1.72E-05	4.74E-06	2.01E-05	6.58E-05
Indiana	La Porte Cou	40800	091408	-86.890552	41.707781	3232	U	1.25E-05	2.08E-05	9.36E-06	2.93E-06	2.02E-05	6.58E-05
Indiana	La Porte Cou	42400	091424	-86.73212	41.595447	6547	U	8.47E-06	2.80E-05	7.08E-06	2.30E-06	2.00E-05	6.58E-05
Indiana	Johnson Cou	610601	0816106.01	-86.156989	39.621171	7944	U	1.13E-05	1.21E-05	1.67E-05	5.76E-06	1.99E-05	6.57E-05
Indiana	Lake County	40600	089406	-87.468509	41.557698	4208	U	1.52E-05	1.31E-05	1.20E-05	5.35E-06	1.99E-05	6.56E-05
Indiana	Porter County	51003	127510.03	-87.158125	41.482422	7167	U	2.47E-05	1.08E-05	6.69E-06	3.41E-06	2.01E-05	6.56E-05
Indiana	Marion Count	310200	0973102	-86.237627	39.879275	5661	U	9.75E-06	9.53E-06	2.03E-05	5.84E-06	2.01E-05	6.55E-05
Indiana	St. Joseph Co	2900	14129	-86.24306	41.660146	1444	U	2.14E-06	2.30E-05	1.66E-05	3.73E-06	2.00E-05	6.55E-05
Indiana	Allen County	11100	003111	-85.014257	41.073247	3173	U	1.81E-06	2.89E-05	1.16E-05	3.09E-06	2.00E-05	6.53E-05
Indiana	Lake County	40300	089403	-87.516933	41.562643	6591	U	1.41E-05	1.31E-05	1.24E-05	5.76E-06	1.99E-05	6.52E-05
Indiana	Clark County	50306	019503.06	-85.727631	38.280891	2689	U	5.91E-06	1.81E-05	1.62E-05	4.88E-06	2.00E-05	6.51E-05
Indiana	Vanderburgh	3100	16331	-87.614619	37.966743	2985	U	7.63E-07	1.59E-05	2.23E-05	6.06E-06	2.00E-05	6.51E-05
Indiana	Allen County	10600	003106	-85.194537	41.127483	6285	U	2.89E-06	3.06E-05	8.96E-06	2.42E-06	2.01E-05	6.50E-05
Indiana	La Porte Cou	40300	091403	-86.902446	41.706801	3012	U	1.14E-05	2.30E-05	7.92E-06	2.61E-06	2.01E-05	6.50E-05
Indiana	La Porte Cou	40700	091407	-86.879456	41.707215	1692	U	1.15E-05	2.37E-05	7.25E-06	2.50E-06	2.00E-05	6.50E-05
Indiana	Porter County	50700	127507	-87.053799	41.487636	12937	U	1.85E-05	1.46E-05	8.13E-06	3.75E-06	1.99E-05	6.49E-05
Indiana	Lake County	40900	089409	-87.430798	41.527229	6568	U	1.33E-05	1.46E-05	1.20E-05	5.13E-06	1.98E-05	6.48E-05
Indiana	Lake County	42700	089427	-87.463228	41.496101	11472	U	1.22E-05	1.21E-05	1.44E-05	5.71E-06	2.01E-05	6.45E-05
Indiana	St. Joseph Co	600	1416	-86.264751	41.685444	3521	U	2.44E-06	1.86E-05	1.87E-05	4.81E-06	2.00E-05	6.45E-05
Indiana	Allen County	10802	003108.02	-85.089894	41.127431	5618	U	2.41E-06	2.80E-05	1.12E-05	2.86E-06	1.99E-05	6.44E-05
Indiana	Vigo County	600	1676	-87.39413	39.467674	2646	U	6.53E-07	2.79E-05	1.38E-05	1.94E-06	2.01E-05	6.44E-05
Indiana	Clark County	50200	019502	-85.742662	38.284274	3568	U	4.01E-06	1.91E-05	1.64E-05	4.75E-06	1.99E-05	6.41E-05
Indiana	Hamilton Cou	111003	0571110.03	-86.101237	39.967395	5269	U	6.12E-06	1.20E-05	1.90E-05	6.87E-06	2.01E-05	6.40E-05
Indiana	Hancock Cou	410800	0594108	-85.903901	39.749008	9169	U	1.89E-05	8.51E-06	1.29E-05	3.88E-06	1.99E-05	6.40E-05
Indiana	St. Joseph Co	2300	14123	-86.296587	41.67496	1608	U	3.83E-06	2.31E-05	1.31E-05	4.03E-06	2.00E-05	6.40E-05
Indiana	St. Joseph Co	2500	14125	-86.310996	41.675493	1904	U	3.71E-06	1.83E-05	1.70E-05	4.97E-06	2.01E-05	6.40E-05
Indiana	Lake County	40500	089405	-87.466943	41.539406	5958	U	1.40E-05	1.33E-05	1.15E-05	5.16E-06	2.00E-05	6.39E-05
Indiana	Lake County	42400	089424	-87.349152	41.506483	17089	U	1.23E-05	1.31E-05	1.34E-05	5.08E-06	2.00E-05	6.39E-05
Indiana	St. Joseph Co	3300	14133	-86.242798	41.646966	3131	U	2.00E-06	1.95E-05	1.80E-05	4.21E-06	2.02E-05	6.39E-05
Indiana	St. Joseph Co	3400	14134	-86.263949	41.652246	3734	U	2.19E-06	2.50E-05	1.30E-05	3.72E-06	2.01E-05	6.39E-05
Indiana	Hamilton Cou	111004	0571110.04	-86.103595	39.949076	3267	U	6.29E-06	1.38E-05	1.74E-05	6.27E-06	2.00E-05	6.37E-05
Indiana	La Porte Cou	40400	091404	-86.901968	41.693797	3391	U	1.12E-05	2.26E-05	7.29E-06	2.55E-06	2.00E-05	6.37E-05
Indiana	Fayette Coun	954300	0419543	-85.136295	39.659967	3134	U	1.59E-06	3.48E-05	6.02E-06	1.25E-06	1.99E-05	6.36E-05
Indiana	Hendricks Co	210900	0632109	-86.399901	39.705664	3002	U	1.48E-05	9.94E-06	1.50E-05	3.90E-06	1.99E-05	6.35E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Johnson Cou	610701	0816107.01	-86.183947	39.580072	5544	U	1.24E-05	1.24E-05	1.40E-05	5.02E-06	1.97E-05	6.35E-05
Indiana	Wayne Count	600	1776	-84.921715	39.847059	2260	U	6.72E-06	3.19E-05	3.91E-06	9.01E-07	2.00E-05	6.34E-05
Indiana	Porter County	50101	127501.01	-87.075539	41.551472	5707	U	2.00E-05	1.31E-05	6.45E-06	3.50E-06	2.00E-05	6.31E-05
Indiana	Floyd County	70700	043707	-85.833699	38.296742	2779	U	2.74E-06	1.56E-05	1.97E-05	4.81E-06	2.00E-05	6.29E-05
Indiana	Floyd County	70801	043708.01	-85.830114	38.302874	3631	U	2.62E-06	1.54E-05	2.01E-05	4.85E-06	1.98E-05	6.29E-05
Indiana	Johnson Cou	610604	0816106.04	-86.205516	39.604181	3643	U	1.50E-05	9.92E-06	1.31E-05	4.90E-06	1.98E-05	6.28E-05
Indiana	Lake County	40400	089404	-87.493237	41.550304	13358	U	1.38E-05	1.24E-05	1.16E-05	5.01E-06	2.00E-05	6.28E-05
Indiana	Dubois Count	953300	0379533	-86.939475	38.412835	5897	R	3.80E-06	3.24E-05	4.97E-06	1.24E-06	2.00E-05	6.25E-05
Indiana	Allen County	11603	003116.03	-85.260172	41.052894	5219	U	2.38E-06	2.57E-05	1.11E-05	3.10E-06	2.02E-05	6.24E-05
Indiana	Hamilton Cou	111005	0571110.05	-86.128082	39.968755	5922	U	5.48E-06	1.17E-05	1.85E-05	6.68E-06	2.00E-05	6.24E-05
Indiana	Vigo County	500	1675	-87.388644	39.474052	2131	U	1.37E-06	2.16E-05	1.72E-05	2.38E-06	1.99E-05	6.24E-05
Indiana	St. Joseph Co	2400	14124	-86.299369	41.667747	3000	U	4.47E-06	1.74E-05	1.58E-05	4.56E-06	2.00E-05	6.22E-05
Indiana	Elkhart Count	1400	03914	-86.029547	41.660074	6640	R	4.93E-06	2.36E-05	1.09E-05	2.59E-06	2.01E-05	6.21E-05
Indiana	St. Joseph Co	11305	141113.05	-86.207774	41.728168	3891	U	2.12E-06	1.61E-05	1.89E-05	4.81E-06	1.99E-05	6.19E-05
Indiana	St. Joseph Co	2100	14121	-86.278158	41.679951	1873	U	2.88E-06	1.83E-05	1.63E-05	4.14E-06	2.02E-05	6.18E-05
Indiana	Vigo County	300	1673	-87.407062	39.47976	2707	U	6.16E-07	2.86E-05	1.11E-05	1.57E-06	2.00E-05	6.18E-05
Indiana	Clark County	50501	019505.01	-85.787225	38.313556	1695	U	2.82E-06	1.77E-05	1.68E-05	4.58E-06	1.99E-05	6.17E-05
Indiana	Allen County	10803	003108.03	-85.07225	41.126348	5822	U	2.15E-06	2.45E-05	1.20E-05	3.00E-06	2.00E-05	6.16E-05
Indiana	Floyd County	70901	043709.01	-85.80989	38.326638	5444	U	2.25E-06	1.62E-05	1.87E-05	4.35E-06	2.01E-05	6.16E-05
Indiana	Hancock Cou	410600	0594106	-85.761039	39.794095	4225	U	1.16E-05	9.57E-06	1.64E-05	4.13E-06	1.99E-05	6.15E-05
Indiana	Hendricks Co	210601	0632106.01	-86.381745	39.783061	7771	U	1.61E-05	8.16E-06	1.32E-05	4.15E-06	1.99E-05	6.14E-05
Indiana	Clark County	50402	019504.02	-85.765092	38.302961	7397	U	2.67E-06	1.76E-05	1.64E-05	4.58E-06	1.99E-05	6.13E-05
Indiana	Porter County	51101	127511.01	-87.188532	41.319879	4853	U	2.86E-05	5.10E-06	4.98E-06	2.59E-06	1.99E-05	6.12E-05
Indiana	Vanderburgh	1900	16319	-87.578398	37.982259	2004	U	9.78E-07	1.96E-05	1.70E-05	3.62E-06	2.01E-05	6.12E-05
Indiana	Elkhart Count	300	0393	-85.81199	41.560233	6387	R	5.31E-06	2.00E-05	1.20E-05	3.78E-06	2.00E-05	6.10E-05
Indiana	Floyd County	70301	043703.01	-85.798307	38.313263	2900	U	2.82E-06	1.74E-05	1.63E-05	4.41E-06	2.01E-05	6.10E-05
Indiana	Elkhart Count	1500	03915	-86.03248	41.709889	7857	R	7.63E-06	1.94E-05	1.13E-05	2.64E-06	2.00E-05	6.09E-05
Indiana	Hendricks Co	210602	0632106.02	-86.394802	39.744397	6935	U	1.71E-05	8.04E-06	1.18E-05	3.97E-06	1.99E-05	6.09E-05
Indiana	Allen County	10809	003108.09	-85.045141	41.110747	5041	U	1.68E-06	2.22E-05	1.33E-05	3.47E-06	2.00E-05	6.07E-05
Indiana	St. Joseph Co	700	1417	-86.256985	41.685977	2213	U	2.56E-06	1.76E-05	1.63E-05	4.21E-06	2.00E-05	6.07E-05
Indiana	Lake County	42602	089426.02	-87.415708	41.488735	2596	U	1.18E-05	1.08E-05	1.22E-05	5.89E-06	1.99E-05	6.06E-05
Indiana	Monroe Coun	202	1052.02	-86.512439	39.168098	6537	U	4.00E-07	1.56E-05	1.97E-05	6.85E-06	1.81E-05	6.06E-05
Indiana	St. Joseph Co	302	1413.02	-86.285526	41.716701	2498	U	2.35E-06	2.07E-05	1.27E-05	4.94E-06	1.99E-05	6.06E-05
Indiana	St. Joseph Co	1800	14118	-86.249081	41.673609	690	U	2.19E-06	1.90E-05	1.58E-05	3.53E-06	2.01E-05	6.06E-05
Indiana	Vanderburgh	1400	16314	-87.548113	37.972955	2444	U	9.40E-07	1.68E-05	1.91E-05	3.76E-06	2.00E-05	6.06E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
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Indiana	Johnson Cou	610800	0816108	-86.118257	39.48572	5714	U	1.60E-05	1.21E-05	8.60E-06	3.73E-06	2.01E-05	6.05E-05
Indiana	Miami County	952200	1039522	-86.070504	40.761631	3522	R	1.86E-06	3.10E-05	6.36E-06	1.16E-06	2.01E-05	6.04E-05
Indiana	Hamilton Cou	111101	0571111.01	-86.09526	39.941089	2655	U	6.86E-06	1.36E-05	1.48E-05	5.04E-06	1.99E-05	6.03E-05
Indiana	Madison Cou	300	0953	-85.689396	40.111467	3506	U	6.05E-07	2.48E-05	1.23E-05	2.53E-06	2.00E-05	6.02E-05
Indiana	Wayne Count	200	1772	-84.880498	39.832724	3697	U	2.18E-06	2.65E-05	9.92E-06	1.64E-06	1.99E-05	6.02E-05
Indiana	Allen County	10810	003108.1	-85.052256	41.095859	9236	U	2.05E-06	2.52E-05	1.01E-05	2.73E-06	2.00E-05	6.01E-05
Indiana	Clark County	50503	019505.03	-85.773972	38.324507	5919	U	2.52E-06	1.66E-05	1.66E-05	4.45E-06	2.00E-05	6.01E-05
Indiana	Lake County	43000	089430	-87.367667	41.421479	8561	U	1.12E-05	8.80E-06	1.36E-05	6.33E-06	2.01E-05	6.01E-05
Indiana	Vanderburgh	3200	16332	-87.628784	37.970109	3953	U	7.02E-07	1.23E-05	2.12E-05	5.69E-06	2.01E-05	6.00E-05
Indiana	Vanderburgh	2500	16325	-87.567133	37.988091	2424	U	8.94E-07	1.74E-05	1.77E-05	3.86E-06	2.01E-05	5.99E-05
Indiana	Vanderburgh	3400	16334	-87.56871	38.022514	3323	U	7.15E-07	1.57E-05	1.90E-05	4.36E-06	2.01E-05	5.99E-05
Indiana	Allen County	10807	003108.07	-85.07149	41.150705	4844	U	1.74E-06	2.18E-05	1.28E-05	3.25E-06	2.02E-05	5.98E-05
Indiana	St. Joseph Co	11303	141113.03	-86.251495	41.737156	8374	U	1.83E-06	2.01E-05	1.38E-05	4.10E-06	2.00E-05	5.98E-05
Indiana	Elkhart Count	400	0394	-85.835819	41.558699	4340	R	5.17E-06	1.90E-05	1.17E-05	3.78E-06	2.00E-05	5.96E-05
Indiana	St. Joseph Co	2600	14126	-86.313412	41.666045	3189	U	2.97E-06	1.52E-05	1.67E-05	4.51E-06	2.01E-05	5.95E-05
Indiana	Lake County	42800	089428	-87.511922	41.500099	10732	U	1.19E-05	1.07E-05	1.13E-05	5.79E-06	1.97E-05	5.94E-05
Indiana	Allen County	11604	003116.04	-85.265696	41.038144	4333	U	2.09E-06	2.10E-05	1.27E-05	3.77E-06	1.98E-05	5.93E-05
Indiana	Clark County	50303	019503.03	-85.726285	38.292776	2928	U	3.00E-06	1.63E-05	1.53E-05	4.65E-06	2.00E-05	5.93E-05
Indiana	Hancock Cou	410500	0594105	-85.770516	39.781344	2065	U	1.16E-05	9.82E-06	1.42E-05	3.87E-06	1.98E-05	5.93E-05
Indiana	Posey County	40500	129405	-87.918316	37.939721	3111	U	9.94E-06	2.23E-05	5.40E-06	1.80E-06	1.99E-05	5.93E-05
Indiana	Allen County	10804	003108.04	-85.055117	41.121948	3326	U	1.78E-06	2.29E-05	1.16E-05	2.98E-06	1.99E-05	5.91E-05
Indiana	Tippecanoe Co	5300	15753	-86.905181	40.431275	3042	U	2.52E-06	1.21E-05	1.98E-05	4.63E-06	2.01E-05	5.91E-05
Indiana	Vanderburgh	1300	16313	-87.552154	37.960625	2767	U	7.45E-07	1.08E-05	2.27E-05	4.80E-06	2.00E-05	5.91E-05
Indiana	Hendricks Co	210800	0632108	-86.382214	39.699702	7215	U	1.43E-05	8.03E-06	1.31E-05	3.67E-06	1.98E-05	5.90E-05
Indiana	Vanderburgh	800	1638	-87.539038	37.959106	3045	U	8.22E-07	1.15E-05	2.21E-05	4.53E-06	2.00E-05	5.90E-05
Indiana	Lake County	43102	089431.02	-87.369407	41.401527	6365	U	1.15E-05	8.15E-06	1.30E-05	6.26E-06	1.99E-05	5.88E-05
Indiana	Monroe Coun	100	1051	-86.531119	39.167498	2877	U	1.54E-07	1.28E-05	1.99E-05	5.82E-06	2.01E-05	5.87E-05
Indiana	Vanderburgh	2100	16321	-87.557783	37.98207	2027	U	1.01E-06	1.64E-05	1.79E-05	3.61E-06	1.98E-05	5.87E-05
Indiana	Wayne Count	300	1773	-84.882332	39.839173	1028	U	2.35E-06	2.79E-05	7.07E-06	1.25E-06	2.00E-05	5.87E-05
Indiana	St. Joseph Co	200	1412	-86.279001	41.698506	3837	U	2.71E-06	1.79E-05	1.35E-05	4.36E-06	2.01E-05	5.86E-05
Indiana	Vanderburgh	2000	16320	-87.568634	37.982028	2175	U	9.24E-07	1.48E-05	1.88E-05	3.87E-06	2.01E-05	5.85E-05
Indiana	Hancock Cou	410400	0594104	-85.778635	39.794928	5021	U	1.12E-05	8.75E-06	1.46E-05	3.79E-06	1.99E-05	5.83E-05
Indiana	Floyd County	70500	043705	-85.823814	38.290944	3470	U	3.40E-06	1.53E-05	1.56E-05	3.94E-06	1.99E-05	5.82E-05
Indiana	Vigo County	700	1677	-87.394599	39.457388	2532	U	5.89E-07	2.23E-05	1.34E-05	1.81E-06	1.99E-05	5.81E-05
Indiana	Lake County	42300	089423	-87.273567	41.478879	4159	U	1.61E-05	9.33E-06	8.34E-06	4.45E-06	1.98E-05	5.80E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
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Indiana	Shelby Count	710400	1457104	-85.763652	39.533014	2021	U	1.67E-05	9.80E-06	9.25E-06	2.56E-06	1.97E-05	5.80E-05
Indiana	Vigo County	200	1672	-87.410872	39.470927	3795	U	4.83E-07	3.03E-05	1.16E-05	1.81E-06	1.36E-05	5.78E-05
Indiana	Johnson Cou	611200	0816112	-85.995717	39.451989	2899	U	1.35E-05	1.22E-05	8.15E-06	3.95E-06	2.00E-05	5.77E-05
Indiana	Vigo County	1100	16711	-87.396993	39.492899	3131	U	6.33E-07	2.25E-05	1.28E-05	1.91E-06	1.98E-05	5.77E-05
Indiana	La Porte Cou	40500	091405	-86.886067	41.692556	3615	U	1.10E-05	1.68E-05	7.32E-06	2.49E-06	2.00E-05	5.76E-05
Indiana	Porter County	50102	127501.02	-86.97547	41.609515	6187	U	1.85E-05	1.07E-05	5.44E-06	3.14E-06	1.98E-05	5.75E-05
Indiana	St. Joseph Co	1300	14113	-86.205504	41.676795	2293	U	2.02E-06	1.45E-05	1.69E-05	4.07E-06	2.00E-05	5.75E-05
Indiana	St. Joseph Co	1600	14116	-86.229027	41.672086	2831	U	2.05E-06	1.64E-05	1.49E-05	3.91E-06	2.02E-05	5.75E-05
Indiana	Vanderburgh	2700	16327	-87.582024	37.995461	1455	U	8.43E-07	1.94E-05	1.37E-05	3.27E-06	2.02E-05	5.74E-05
Indiana	Madison Cou	1100	09511	-85.664211	40.108979	3562	U	1.86E-07	2.27E-05	1.21E-05	2.43E-06	1.99E-05	5.73E-05
Indiana	Lake County	42500	089425	-87.364773	41.466805	13436	U	1.09E-05	9.45E-06	1.20E-05	4.64E-06	2.01E-05	5.72E-05
Indiana	Steuben Cou	971100	1519711	-85.041847	41.688446	2721	R	2.41E-05	6.96E-06	4.63E-06	1.12E-06	2.01E-05	5.69E-05
Indiana	Adams Count	30400	001304	-84.928545	40.788846	2820	U	4.77E-07	3.26E-05	2.73E-06	8.68E-07	2.01E-05	5.68E-05
Indiana	Clark County	50305	019503.05	-85.711725	38.289922	2983	U	2.46E-06	1.43E-05	1.51E-05	4.92E-06	2.01E-05	5.68E-05
Indiana	Vanderburgh	2300	16323	-87.556261	37.989317	2554	U	9.49E-07	1.87E-05	1.41E-05	3.20E-06	1.99E-05	5.68E-05
Indiana	Hendricks Co	210102	0632101.02	-86.374233	39.826647	4964	U	9.04E-06	7.75E-06	1.58E-05	4.20E-06	1.99E-05	5.67E-05
Indiana	Allen County	11203	003112.03	-85.014387	41.057952	4423	U	1.95E-06	2.31E-05	8.86E-06	2.58E-06	2.01E-05	5.66E-05
Indiana	Elkhart Count	2100	03921	-85.948651	41.650679	7838	R	6.62E-06	1.45E-05	1.26E-05	2.61E-06	1.99E-05	5.62E-05
Indiana	Monroe Coun	201	1052.01	-86.513521	39.176672	8595	U	4.76E-07	1.30E-05	1.69E-05	5.94E-06	1.99E-05	5.62E-05
Indiana	St. Joseph Co	10400	141104	-86.149295	41.661136	3484	U	2.34E-06	1.81E-05	1.24E-05	3.24E-06	2.00E-05	5.61E-05
Indiana	Lake County	43201	089432.01	-87.41991	41.364381	2974	U	1.12E-05	6.70E-06	1.10E-05	7.13E-06	2.00E-05	5.60E-05
Indiana	Vanderburgh	1800	16318	-87.571973	37.971818	902	U	9.10E-07	1.22E-05	1.92E-05	3.59E-06	2.01E-05	5.60E-05
Indiana	St. Joseph Co	1000	14110	-86.234533	41.685545	3768	U	2.00E-06	1.53E-05	1.49E-05	3.75E-06	2.00E-05	5.59E-05
Indiana	St. Joseph Co	11100	141111	-86.326485	41.682111	5319	U	3.13E-06	1.50E-05	1.33E-05	4.49E-06	2.00E-05	5.59E-05
Indiana	Shelby Count	710700	1457107	-85.777883	39.508971	4892	U	1.30E-05	1.05E-05	9.81E-06	2.74E-06	1.98E-05	5.59E-05
Indiana	Elkhart Count	1200	03912	-86.000055	41.44641	4886	R	4.75E-06	1.74E-05	1.04E-05	3.34E-06	2.00E-05	5.58E-05
Indiana	Allen County	4200	00342	-85.095738	41.12285	685	U	1.94E-06	2.57E-05	1.02E-05	2.69E-06	1.51E-05	5.57E-05
Indiana	Madison Cou	1900	09519	-85.679752	40.073972	5857	U	1.11E-06	1.75E-05	1.43E-05	2.91E-06	1.98E-05	5.57E-05
Indiana	Vanderburgh	1200	16312	-87.561455	37.960364	2632	U	7.10E-07	9.69E-06	2.08E-05	4.50E-06	1.99E-05	5.57E-05
Indiana	Allen County	11304	003113.04	-85.084522	41.017572	5237	U	2.00E-06	2.24E-05	8.66E-06	2.54E-06	2.00E-05	5.56E-05
Indiana	Monroe Coun	1600	10516	-86.529032	39.177307	5613	U	2.89E-07	1.27E-05	1.72E-05	5.46E-06	2.00E-05	5.56E-05
Indiana	St. Joseph Co	11301	141113.01	-86.212276	41.702168	5089	U	2.10E-06	1.53E-05	1.45E-05	3.71E-06	2.00E-05	5.56E-05
Indiana	Vanderburgh	400	1634	-87.519945	37.973322	2351	U	8.63E-07	1.34E-05	1.74E-05	3.79E-06	2.01E-05	5.56E-05
Indiana	Allen County	10302	003103.02	-85.133735	41.186997	6468	U	1.90E-06	2.06E-05	1.03E-05	2.69E-06	2.00E-05	5.55E-05
Indiana	Lake County	43202	089432.02	-87.344339	41.398216	3840	U	1.30E-05	7.55E-06	9.58E-06	5.56E-06	1.98E-05	5.55E-05

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Indiana	Marion Count	310103	0973101.03	-86.295081	39.897821	2881	U	7.23E-06	7.61E-06	1.52E-05	5.53E-06	1.99E-05	5.55E-05
Indiana	Vanderburgh	300	1633	-87.531153	37.97682	4405	U	9.14E-07	1.50E-05	1.62E-05	3.59E-06	1.97E-05	5.55E-05
Indiana	St. Joseph Co	1200	14112	-86.221811	41.680153	2419	U	2.11E-06	1.36E-05	1.58E-05	3.91E-06	2.00E-05	5.54E-05
Indiana	St. Joseph Co	11503	141115.03	-86.133939	41.684423	2928	U	2.76E-06	1.52E-05	1.37E-05	3.69E-06	2.00E-05	5.54E-05
Indiana	Vanderburgh	2600	16326	-87.580104	37.988161	2468	U	9.52E-07	1.43E-05	1.63E-05	3.84E-06	2.00E-05	5.54E-05
Indiana	Vanderburgh	2800	16328	-87.597133	37.98899	2331	U	9.68E-07	1.68E-05	1.42E-05	3.31E-06	2.02E-05	5.54E-05
Indiana	St. Joseph Co	900	14119	-86.241499	41.680672	1345	U	2.02E-06	1.53E-05	1.43E-05	3.72E-06	2.00E-05	5.53E-05
Indiana	Clark County	50304	019503.04	-85.720634	38.303294	4028	U	2.13E-06	1.40E-05	1.47E-05	4.32E-06	2.01E-05	5.52E-05
Indiana	St. Joseph Co	1100	14111	-86.207254	41.688971	4810	U	2.06E-06	1.52E-05	1.42E-05	3.74E-06	2.00E-05	5.52E-05
Indiana	Madison Cou	2000	09520	-85.657574	40.0743	3581	U	8.43E-07	2.02E-05	1.19E-05	2.49E-06	1.97E-05	5.51E-05
Indiana	St. Joseph Co	11501	141115.01	-86.19393	41.694986	3962	U	2.22E-06	1.26E-05	1.62E-05	4.22E-06	1.98E-05	5.50E-05
Indiana	Vanderburgh	1500	16315	-87.549782	37.966883	2407	U	8.31E-07	1.20E-05	1.85E-05	3.65E-06	2.00E-05	5.50E-05
Indiana	Hendricks Co	210200	0632102	-86.396897	39.836968	9042	U	7.68E-06	7.44E-06	1.55E-05	4.04E-06	2.01E-05	5.48E-05
Indiana	Tippecanoe Co	200	1572	-86.878315	40.435001	1984	U	1.80E-06	1.64E-05	1.41E-05	2.75E-06	1.97E-05	5.48E-05
Indiana	Hancock Cou	410200	0594102	-85.882903	39.865596	11157	U	9.79E-06	8.08E-06	1.34E-05	3.26E-06	2.01E-05	5.47E-05
Indiana	Huntington Co	991500	0699915	-85.498197	40.889839	4906	U	6.42E-06	1.59E-05	9.55E-06	2.65E-06	2.00E-05	5.46E-05
Indiana	St. Joseph Co	10700	141107	-86.171945	41.672079	4378	U	2.53E-06	1.44E-05	1.41E-05	3.50E-06	2.01E-05	5.46E-05
Indiana	St. Joseph Co	301	1413.01	-86.267949	41.701045	2984	U	2.23E-06	1.50E-05	1.32E-05	4.03E-06	2.00E-05	5.45E-05
Indiana	St. Joseph Co	3100	14131	-86.227305	41.654737	3702	U	1.86E-06	1.40E-05	1.49E-05	3.68E-06	2.00E-05	5.45E-05
Indiana	Floyd County	70600	043706	-85.8498	38.283458	2612	U	2.42E-06	1.53E-05	1.30E-05	3.53E-06	2.01E-05	5.44E-05
Indiana	Delaware Cou	100	0351	-85.38508	40.193418	617	U	1.29E-07	1.61E-05	1.27E-05	5.33E-06	2.01E-05	5.43E-05
Indiana	Clark County	50504	019505.04	-85.756749	38.332397	3144	U	2.23E-06	1.36E-05	1.43E-05	4.08E-06	1.99E-05	5.42E-05
Indiana	La Porte Cou	40600	091406	-86.863233	41.697082	4757	U	9.07E-06	1.70E-05	6.06E-06	2.13E-06	1.99E-05	5.42E-05
Indiana	St. Joseph Co	10200	141102	-86.185399	41.655615	5925	U	2.65E-06	1.22E-05	1.56E-05	3.82E-06	1.99E-05	5.42E-05
Indiana	Vigo County	400	1674	-87.388096	39.480675	3540	U	7.25E-07	1.92E-05	1.24E-05	1.76E-06	2.01E-05	5.42E-05
Indiana	Vanderburgh	1600	16316	-87.562178	37.969008	1318	U	8.35E-07	1.21E-05	1.77E-05	3.33E-06	2.01E-05	5.40E-05
Indiana	Delaware Cou	2000	03520	-85.360931	40.214134	5276	U	1.20E-07	1.61E-05	1.20E-05	5.35E-06	2.03E-05	5.39E-05
Indiana	Jackson Cou	967600	0719676	-85.883117	38.967631	3471	R	2.77E-07	2.71E-05	5.28E-06	1.23E-06	2.01E-05	5.39E-05
Indiana	Madison Cou	1700	09517	-85.720465	40.09843	4409	U	4.65E-07	1.74E-05	1.35E-05	2.75E-06	1.99E-05	5.39E-05
Indiana	St. Joseph Co	1500	14115	-86.212538	41.662939	3498	U	1.98E-06	1.36E-05	1.45E-05	3.67E-06	2.02E-05	5.39E-05
Indiana	Vigo County	900	1679	-87.406958	39.490782	3005	U	6.02E-07	2.28E-05	9.16E-06	1.36E-06	2.00E-05	5.39E-05
Indiana	Delaware Cou	1200	03512	-85.367062	40.207297	2629	U	1.29E-07	1.58E-05	1.24E-05	5.40E-06	2.00E-05	5.38E-05
Indiana	St. Joseph Co	10600	141106	-86.189594	41.67084	4336	U	2.30E-06	1.30E-05	1.47E-05	3.70E-06	2.01E-05	5.38E-05
Indiana	Vanderburgh	900	1639	-87.520685	37.955923	6279	U	8.51E-07	9.74E-06	1.90E-05	4.12E-06	2.01E-05	5.38E-05
Indiana	Allen County	10808	003108.08	-85.034765	41.128428	4718	U	1.65E-06	2.01E-05	9.13E-06	2.44E-06	2.01E-05	5.35E-05

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Indiana	Madison Cou	1200	09512	-85.644122	40.107445	2860	U	4.42E-07	1.71E-05	1.31E-05	2.59E-06	2.03E-05	5.35E-05
Indiana	St. Joseph Co	10100	141101	-86.206124	41.654546	3339	U	2.16E-06	1.22E-05	1.52E-05	3.86E-06	2.01E-05	5.35E-05
Indiana	St. Joseph Co	11302	141113.02	-86.227315	41.731075	5204	U	2.07E-06	1.40E-05	1.34E-05	3.86E-06	2.01E-05	5.35E-05
Indiana	Tippecanoe Co	1000	15710	-86.889434	40.407958	1540	U	6.17E-06	8.76E-06	1.55E-05	3.20E-06	1.99E-05	5.35E-05
Indiana	St. Joseph Co	1400	141114	-86.206798	41.668962	3571	U	2.11E-06	1.28E-05	1.46E-05	3.76E-06	2.02E-05	5.34E-05
Indiana	Tippecanoe Co	5500	15755	-86.909677	40.421321	4828	U	2.98E-06	1.07E-05	1.89E-05	4.44E-06	1.65E-05	5.34E-05
Indiana	Vanderburgh	600	1636	-87.535493	37.966958	2056	U	8.23E-07	1.14E-05	1.75E-05	3.56E-06	2.02E-05	5.34E-05
Indiana	Delaware Cou	1400	03514	-85.363455	40.171256	2243	U	1.36E-07	1.52E-05	1.20E-05	5.90E-06	2.00E-05	5.33E-05
Indiana	Johnson Cou	610702	0816107.02	-86.18955	39.535907	3015	U	1.17E-05	8.10E-06	9.93E-06	3.92E-06	1.96E-05	5.33E-05
Indiana	Allen County	11605	003116.05	-85.2638	41.02737	1760	U	2.03E-06	1.84E-05	9.79E-06	3.15E-06	1.99E-05	5.32E-05
Indiana	Kosciusko Co	961800	0859618	-85.884954	41.244102	5052	R	1.83E-05	7.10E-06	4.86E-06	2.76E-06	2.02E-05	5.32E-05
Indiana	Lake County	43402	089434.02	-87.385566	41.290144	10437	U	1.66E-05	4.93E-06	7.00E-06	4.75E-06	1.99E-05	5.32E-05
Indiana	Vigo County	1200	16712	-87.381593	39.489126	2733	U	7.10E-07	1.74E-05	1.30E-05	1.90E-06	2.01E-05	5.32E-05
Indiana	La Porte Cou	41400	091414	-86.880343	41.676282	3496	U	1.11E-05	1.41E-05	5.85E-06	2.26E-06	1.99E-05	5.31E-05
Indiana	St. Joseph Co	3200	14132	-86.224775	41.64084	5785	U	1.77E-06	1.20E-05	1.54E-05	3.82E-06	2.01E-05	5.31E-05
Indiana	Lake County	43101	089431.01	-87.418133	41.390019	2774	U	1.05E-05	6.79E-06	9.71E-06	5.93E-06	2.01E-05	5.30E-05
Indiana	Morgan Coun	510100	1095101	-86.302261	39.595941	5408	U	1.18E-05	7.13E-06	9.99E-06	4.15E-06	1.99E-05	5.29E-05
Indiana	Hamilton Cou	110802	0571108.02	-86.028973	39.959574	10553	U	5.45E-06	8.86E-06	1.42E-05	4.50E-06	1.98E-05	5.28E-05
Indiana	Vanderburgh	100	1631	-87.536383	37.996874	2255	U	9.85E-07	1.53E-05	1.33E-05	3.05E-06	2.01E-05	5.28E-05
Indiana	Lake County	42601	089426.01	-87.445646	41.462153	16798	U	1.03E-05	8.55E-06	9.76E-06	4.24E-06	1.98E-05	5.26E-05
Indiana	La Porte Cou	40100	091401	-86.916683	41.705093	4183	U	1.12E-05	1.38E-05	5.40E-06	2.03E-06	2.01E-05	5.26E-05
Indiana	St. Joseph Co	10300	141103	-86.169404	41.653509	5453	U	2.18E-06	1.23E-05	1.45E-05	3.75E-06	1.99E-05	5.26E-05
Indiana	Vanderburgh	500	1635	-87.521214	37.96621	2077	U	8.33E-07	1.07E-05	1.74E-05	3.65E-06	2.00E-05	5.26E-05
Indiana	Allen County	10806	003108.06	-85.066052	41.161953	6329	U	1.70E-06	1.91E-05	9.29E-06	2.42E-06	2.00E-05	5.25E-05
Indiana	St. Joseph Co	3500	14135	-86.242912	41.636196	3028	U	1.90E-06	1.44E-05	1.27E-05	3.40E-06	2.00E-05	5.24E-05
Indiana	Bartholomew	11500	005115	-85.955591	39.114196	5475	R	2.58E-06	2.46E-05	3.75E-06	1.03E-06	2.00E-05	5.19E-05
Indiana	Kosciusko Co	962300	0859623	-85.841438	41.209064	3805	R	1.96E-05	5.59E-06	4.21E-06	2.63E-06	1.99E-05	5.19E-05
Indiana	La Porte Cou	41100	091411	-86.854554	41.740578	2837	U	8.75E-06	1.60E-05	5.44E-06	2.05E-06	1.96E-05	5.19E-05
Indiana	St. Joseph Co	11304	141113.04	-86.199341	41.755762	2564	U	2.15E-06	1.23E-05	1.34E-05	3.98E-06	2.01E-05	5.19E-05
Indiana	Tippecanoe Co	10500	157105	-86.926024	40.421348	3578	U	3.66E-06	9.70E-06	1.44E-05	4.14E-06	2.00E-05	5.19E-05
Indiana	Vigo County	1000	16710	-87.395669	39.508841	3163	U	5.58E-07	2.09E-05	9.13E-06	1.39E-06	1.99E-05	5.19E-05
Indiana	Delaware Cou	300	0353	-85.375664	40.18521	2151	U	1.43E-07	1.57E-05	1.10E-05	4.87E-06	2.01E-05	5.18E-05
Indiana	Hancock Cou	410300	0594103	-85.784732	39.818601	5176	U	1.07E-05	7.00E-06	1.12E-05	2.92E-06	2.01E-05	5.18E-05
Indiana	Hamilton Cou	110700	0571107	-86.010547	40.039454	3804	U	3.36E-06	7.78E-06	1.52E-05	5.42E-06	1.99E-05	5.17E-05
Indiana	Hamilton Cou	110902	0571109.02	-86.144497	39.989429	7774	U	5.00E-06	6.48E-06	1.52E-05	5.20E-06	1.98E-05	5.17E-05

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Indiana	Hendricks Co	210700	0632107	-86.384896	39.680918	9251	U	1.24E-05	6.08E-06	1.02E-05	3.05E-06	1.99E-05	5.16E-05
Indiana	Allen County	11702	003117.02	-85.156055	40.973752	3378	U	1.43E-06	2.06E-05	6.59E-06	2.90E-06	2.00E-05	5.15E-05
Indiana	Clark County	50604	019506.04	-85.691531	38.305828	5669	U	1.89E-06	1.13E-05	1.39E-05	4.42E-06	2.00E-05	5.15E-05
Indiana	Delaware Cou	600	0356	-85.39476	40.1905	2066	U	1.40E-07	1.66E-05	1.01E-05	4.61E-06	2.00E-05	5.15E-05
Indiana	Hamilton Cou	110901	0571109.01	-86.091529	39.983884	7038	U	5.97E-06	7.11E-06	1.38E-05	4.82E-06	1.97E-05	5.15E-05
Indiana	Johnson Cou	611300	0816113	-85.96523	39.353006	4091	U	6.92E-06	1.33E-05	8.46E-06	2.83E-06	2.00E-05	5.15E-05
Indiana	La Porte Cou	41900	091419	-86.579709	41.578052	4686	U	4.27E-06	2.02E-05	5.07E-06	1.85E-06	2.01E-05	5.15E-05
Indiana	Clark County	50601	019506.01	-85.733825	38.32605	4798	U	2.09E-06	1.22E-05	1.31E-05	3.82E-06	2.02E-05	5.13E-05
Indiana	Clark County	50603	019506.03	-85.70498	38.319119	4222	U	1.82E-06	1.14E-05	1.38E-05	4.21E-06	2.00E-05	5.13E-05
Indiana	Lake County	43401	089434.01	-87.461097	41.284412	4231	U	1.39E-05	5.10E-06	7.36E-06	4.99E-06	1.99E-05	5.12E-05
Indiana	Monroe Coun	301	1053.01	-86.528783	39.158134	4284	U	1.10E-07	1.13E-05	1.51E-05	4.57E-06	2.01E-05	5.12E-05
Indiana	Bartholomew	10900	005109	-85.973361	39.187295	2292	R	3.11E-06	2.01E-05	6.20E-06	1.73E-06	2.00E-05	5.11E-05
Indiana	Delaware Cou	902	0359.02	-85.408304	40.204431	6583	U	2.73E-07	1.11E-05	1.33E-05	9.88E-06	1.64E-05	5.10E-05
Indiana	Hancock Cou	410700	0594107	-85.709136	39.763733	4532	U	1.41E-05	5.27E-06	9.26E-06	2.45E-06	2.00E-05	5.10E-05
Indiana	Porter County	51002	127510.02	-87.006922	41.44523	5172	U	1.48E-05	8.61E-06	5.01E-06	2.52E-06	2.00E-05	5.10E-05
Indiana	Vanderburgh	3900	16339	-87.57851	38.027171	3127	U	6.71E-07	1.29E-05	1.40E-05	3.34E-06	2.01E-05	5.10E-05
Indiana	Tippecanoe Co	10300	157103	-86.922191	40.433633	4017	U	2.22E-06	1.33E-05	1.34E-05	3.32E-06	1.87E-05	5.09E-05
Indiana	Hamilton Cou	110504	0571105.04	-85.997036	40.047853	5950	U	3.25E-06	8.06E-06	1.44E-05	5.12E-06	2.00E-05	5.08E-05
Indiana	Hamilton Cou	111001	0571110.01	-86.187563	39.955935	2587	U	5.15E-06	8.46E-06	1.27E-05	4.52E-06	2.00E-05	5.08E-05
Indiana	Lagrange Cou	970400	0879704	-85.559763	41.585209	6432	R	2.07E-05	3.12E-06	4.14E-06	2.84E-06	2.00E-05	5.08E-05
Indiana	St. Joseph Co	11600	141116	-86.085545	41.672565	11740	U	3.65E-06	1.26E-05	1.14E-05	2.92E-06	2.02E-05	5.08E-05
Indiana	Allen County	11802	003118.02	-84.953466	40.962889	1633	U	1.03E-06	2.13E-05	5.80E-06	2.38E-06	2.01E-05	5.06E-05
Indiana	Elkhart Count	2000	03920	-85.906126	41.630555	5757	R	6.13E-06	1.13E-05	1.03E-05	2.61E-06	2.01E-05	5.04E-05
Indiana	Hamilton Cou	110600	0571106	-86.005047	40.051035	3392	U	3.24E-06	7.77E-06	1.41E-05	5.13E-06	2.01E-05	5.03E-05
Indiana	Shelby Count	710200	1457102	-85.909612	39.635296	5506	U	1.25E-05	7.05E-06	8.44E-06	2.58E-06	1.97E-05	5.03E-05
Indiana	Vigo County	1500	16715	-87.380419	39.457289	3512	U	5.59E-07	1.46E-05	1.33E-05	1.81E-06	2.01E-05	5.03E-05
Indiana	Bartholomew	11100	005111	-85.957872	39.29423	6473	R	4.50E-06	1.96E-05	4.82E-06	1.36E-06	2.00E-05	5.02E-05
Indiana	St. Joseph Co	11200	141112	-86.243928	41.702238	8299	U	1.91E-06	1.45E-05	1.06E-05	3.30E-06	2.00E-05	5.02E-05
Indiana	Delaware Cou	700	0357	-85.401308	40.196646	3606	U	7.33E-07	9.23E-06	1.36E-05	6.58E-06	2.00E-05	5.01E-05
Indiana	Delaware Cou	400	0354	-85.386995	40.182045	2680	U	1.73E-07	1.37E-05	1.07E-05	5.46E-06	1.99E-05	5.00E-05
Indiana	Vanderburgh	3000	16330	-87.612034	37.985364	4909	U	6.86E-07	1.15E-05	1.45E-05	3.18E-06	2.01E-05	5.00E-05
Indiana	Vigo County	10900	167109	-87.452343	39.416948	2121	U	4.52E-07	2.03E-05	8.49E-06	1.84E-06	1.88E-05	5.00E-05
Indiana	La Porte Cou	42600	091426	-86.897252	41.541597	6674	U	1.30E-05	1.03E-05	4.69E-06	1.84E-06	2.00E-05	4.99E-05
Indiana	Vanderburgh	201	1632.01	-87.503379	38.004056	5864	U	7.26E-07	1.08E-05	1.46E-05	3.67E-06	2.01E-05	4.99E-05
Indiana	Vanderburgh	3702	16337.02	-87.503122	37.955121	5130	U	7.21E-07	8.52E-06	1.69E-05	3.82E-06	1.99E-05	4.99E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
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Indiana	Boone County	810602	0118106.02	-86.267107	39.956168	7023	U	7.11E-06	6.82E-06	1.16E-05	4.15E-06	2.01E-05	4.98E-05
Indiana	Morgan Coun	510300	1095103	-86.372267	39.619145	5087	U	9.81E-06	7.13E-06	1.01E-05	2.91E-06	1.98E-05	4.98E-05
Indiana	Wayne Count	800	1778	-84.909593	39.824849	4632	U	2.04E-06	2.11E-05	5.52E-06	1.14E-06	2.01E-05	4.98E-05
Indiana	Bartholomew	11400	005114	-85.839467	39.152235	3955	R	2.36E-06	2.22E-05	3.75E-06	1.13E-06	2.03E-05	4.97E-05
Indiana	Johnson Cou	611400	0816114	-86.131929	39.376768	5778	U	9.87E-06	8.85E-06	7.79E-06	3.27E-06	1.99E-05	4.97E-05
Indiana	La Porte Cou	41300	091413	-86.836174	41.720745	2745	U	7.93E-06	1.41E-05	5.77E-06	2.05E-06	1.98E-05	4.96E-05
Indiana	Porter County	51102	127511.02	-87.024368	41.309238	3322	U	1.71E-05	6.39E-06	3.85E-06	2.34E-06	2.00E-05	4.96E-05
Indiana	Allen County	11602	003116.02	-85.304954	41.034857	3689	U	2.24E-06	1.69E-05	7.70E-06	2.37E-06	2.02E-05	4.94E-05
Indiana	Elkhart Count	700	0397	-85.83838	41.720952	5126	R	5.95E-06	1.19E-05	8.73E-06	2.71E-06	2.00E-05	4.94E-05
Indiana	La Porte Cou	41500	091415	-86.854418	41.638455	4350	U	1.02E-05	1.28E-05	4.52E-06	1.77E-06	2.00E-05	4.93E-05
Indiana	St. Joseph Co	10800	141108	-86.487143	41.700444	3517	U	1.14E-06	1.79E-05	7.33E-06	2.96E-06	2.00E-05	4.93E-05
Indiana	Bartholomew	11000	005110	-86.018395	39.182656	4092	R	3.00E-06	2.10E-05	4.05E-06	1.05E-06	2.01E-05	4.92E-05
Indiana	St. Joseph Co	11306	141113.06	-86.188029	41.734241	2300	U	2.01E-06	1.16E-05	1.18E-05	3.66E-06	2.01E-05	4.92E-05
Indiana	Elkhart Count	800	0398	-85.716029	41.680882	8717	R	1.19E-05	8.07E-06	6.58E-06	2.49E-06	2.00E-05	4.91E-05
Indiana	St. Joseph Co	11502	141115.02	-86.176751	41.69243	4983	U	2.13E-06	1.12E-05	1.22E-05	3.48E-06	2.01E-05	4.91E-05
Indiana	Shelby Count	710500	1457105	-85.75893	39.527384	1817	U	7.70E-06	1.00E-05	8.97E-06	2.46E-06	2.00E-05	4.91E-05
Indiana	Allen County	10500	003105	-85.28376	41.131482	1898	U	2.54E-06	1.69E-05	6.76E-06	2.52E-06	2.03E-05	4.90E-05
Indiana	Elkhart Count	1398	03913.98	-85.982079	41.5548	5588	R	1.12E-05	7.58E-06	7.58E-06	2.56E-06	2.01E-05	4.90E-05
Indiana	Bartholomew	11300	005113	-85.783498	39.207127	4008	R	3.24E-06	2.07E-05	4.01E-06	1.20E-06	1.97E-05	4.89E-05
Indiana	Madison Cou	10300	095103	-85.837681	40.268629	3525	U	7.96E-07	1.44E-05	1.17E-05	2.29E-06	1.97E-05	4.89E-05
Indiana	Tippecanoe C	1400	15714	-86.874619	40.383435	3685	U	4.89E-06	8.74E-06	1.28E-05	2.66E-06	1.98E-05	4.89E-05
Indiana	Monroe Coun	302	1053.02	-86.516043	39.159511	3254	U	3.21E-07	9.41E-06	1.48E-05	4.41E-06	1.98E-05	4.88E-05
Indiana	Delaware Cou	1300	03513	-85.357056	40.18255	3670	U	2.26E-07	1.29E-05	1.06E-05	4.84E-06	2.01E-05	4.87E-05
Indiana	Vanderburgh	3801	16338.01	-87.483697	37.965928	4871	U	6.31E-07	7.98E-06	1.65E-05	3.45E-06	2.00E-05	4.86E-05
Indiana	Elkhart Count	200	0392	-85.830389	41.595325	5172	R	4.55E-06	1.12E-05	9.61E-06	3.13E-06	2.00E-05	4.85E-05
Indiana	Floyd County	71001	043710.01	-85.817629	38.343305	7995	U	1.83E-06	1.02E-05	1.32E-05	3.21E-06	2.00E-05	4.84E-05
Indiana	St. Joseph Co	11800	141118	-86.2357	41.617529	6944	U	1.56E-06	1.08E-05	1.29E-05	3.26E-06	1.98E-05	4.83E-05
Indiana	Tippecanoe C	1900	15719	-86.839727	40.430982	4244	U	1.88E-06	8.39E-06	1.48E-05	3.14E-06	2.01E-05	4.83E-05
Indiana	Kosciusko Co	961700	0859617	-85.804055	41.281968	2555	R	1.41E-05	6.16E-06	4.83E-06	3.04E-06	2.00E-05	4.81E-05
Indiana	Tippecanoe C	1800	15718	-86.843992	40.421038	3358	U	2.35E-06	8.01E-06	1.46E-05	3.15E-06	2.00E-05	4.80E-05
Indiana	Morgan Coun	510900	1095109	-86.429858	39.425038	4096	U	2.87E-06	1.05E-05	1.19E-05	2.83E-06	1.98E-05	4.79E-05
Indiana	Vanderburgh	10202	163102.02	-87.517059	38.026571	2660	U	7.98E-07	1.32E-05	1.04E-05	3.47E-06	2.00E-05	4.79E-05
Indiana	Elkhart Count	2297	03922.97	-85.96467	41.652262	18	R	5.11E-06	1.24E-05	1.26E-05	2.34E-06	1.54E-05	4.78E-05
Indiana	Tippecanoe C	10400	157104	-86.923305	40.42633	6921	U	2.30E-06	1.13E-05	1.48E-05	4.05E-06	1.54E-05	4.78E-05
Indiana	Vanderburgh	2400	16324	-87.55507	38.001427	3464	U	7.40E-07	1.04E-05	1.36E-05	3.04E-06	2.00E-05	4.78E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
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Indiana	Vigo County	1400	16714	-87.375406	39.46941	3318	U	5.86E-07	1.44E-05	1.12E-05	1.61E-06	2.00E-05	4.77E-05
Indiana	Hamilton Cou	110801	0571108.01	-85.943975	39.953012	4396	U	4.41E-06	7.37E-06	1.23E-05	3.77E-06	1.98E-05	4.76E-05
Indiana	Madison Cou	1400	09514	-85.67726	40.135772	4609	U	8.72E-07	1.33E-05	1.09E-05	2.52E-06	2.00E-05	4.76E-05
Indiana	Madison Cou	10500	095105	-85.672022	40.258958	3784	U	1.95E-07	1.49E-05	1.04E-05	2.18E-06	1.98E-05	4.75E-05
Indiana	Lake County	42900	089429	-87.461699	41.387219	7314	U	9.53E-06	5.95E-06	7.74E-06	4.30E-06	1.98E-05	4.73E-05
Indiana	La Porte Cou	41600	091416	-86.793563	41.690839	6056	U	7.71E-06	1.29E-05	4.68E-06	1.78E-06	2.02E-05	4.73E-05
Indiana	St. Joseph Co	11000	141110	-86.292025	41.738935	3883	U	1.78E-06	1.13E-05	1.02E-05	3.98E-06	2.00E-05	4.73E-05
Indiana	Wayne Count	400	1774	-84.883991	39.859911	4383	U	4.87E-06	1.66E-05	4.88E-06	1.02E-06	2.00E-05	4.73E-05
Indiana	La Porte Cou	41200	091412	-86.82529	41.754281	1439	U	5.53E-06	1.28E-05	6.21E-06	2.90E-06	1.98E-05	4.72E-05
Indiana	Monroe Coun	1000	10510	-86.507849	39.137914	6513	U	9.47E-08	8.97E-06	1.37E-05	4.40E-06	2.00E-05	4.72E-05
Indiana	Shelby Count	710300	1457103	-85.788929	39.583305	4317	U	1.24E-05	6.06E-06	6.89E-06	2.04E-06	1.99E-05	4.72E-05
Indiana	Noble County	972200	1139722	-85.588515	41.462947	3777	R	1.09E-05	8.34E-06	5.64E-06	2.03E-06	2.02E-05	4.71E-05
Indiana	Vanderburgh	1700	16317	-87.568966	37.965353	1433	U	7.97E-07	8.38E-06	1.50E-05	3.08E-06	1.98E-05	4.71E-05
Indiana	Vanderburgh	3701	16337.01	-87.502077	37.969139	2508	U	7.87E-07	1.02E-05	1.31E-05	2.96E-06	2.01E-05	4.71E-05
Indiana	Posey County	40700	129407	-87.888168	37.937181	3171	U	3.51E-06	1.63E-05	5.19E-06	1.81E-06	2.03E-05	4.70E-05
Indiana	Madison Cou	10600	095106	-85.675238	40.264935	6273	U	1.27E-07	1.44E-05	1.03E-05	2.13E-06	1.99E-05	4.69E-05
Indiana	Madison Cou	1300	09513	-85.653784	40.125335	4168	U	4.26E-07	1.33E-05	1.10E-05	2.26E-06	1.99E-05	4.68E-05
Indiana	Allen County	11801	003118.01	-85.06299	40.968543	3529	U	1.21E-06	1.70E-05	6.34E-06	2.06E-06	2.01E-05	4.67E-05
Indiana	St. Joseph Co	11402	141114.02	-86.098859	41.741587	6172	U	3.38E-06	1.02E-05	9.69E-06	3.21E-06	2.01E-05	4.66E-05
Indiana	Vanderburgh	3500	16335	-87.550297	38.021463	2546	U	7.42E-07	1.13E-05	1.16E-05	3.07E-06	1.99E-05	4.66E-05
Indiana	Morgan Coun	510700	1095107	-86.415666	39.422586	7346	U	3.46E-06	9.32E-06	1.10E-05	2.84E-06	1.99E-05	4.65E-05
Indiana	Lake County	10299	089102.99	-87.404973	41.639682	19	U	1.56E-05	7.96E-06	5.44E-06	3.61E-06	1.38E-05	4.64E-05
Indiana	Allen County	11000	003110	-84.921787	41.049744	2414	U	1.19E-06	1.63E-05	6.63E-06	2.18E-06	2.00E-05	4.63E-05
Indiana	Tippecanoe C	100	1571	-86.874378	40.441552	2101	U	1.50E-06	1.38E-05	9.13E-06	1.97E-06	1.99E-05	4.63E-05
Indiana	Tippecanoe C	1200	15712	-86.871995	40.408108	3261	U	4.47E-06	7.28E-06	1.21E-05	2.49E-06	2.00E-05	4.63E-05
Indiana	Allen County	10301	003103.01	-85.141201	41.230131	4441	U	1.77E-06	1.41E-05	8.05E-06	2.20E-06	2.01E-05	4.62E-05
Indiana	Huntington Co	991900	0699919	-85.506268	40.865953	4288	U	2.73E-06	1.47E-05	6.63E-06	2.00E-06	2.02E-05	4.62E-05
Indiana	St. Joseph Co	11401	141114.01	-86.161053	41.745762	5353	U	2.37E-06	1.01E-05	1.03E-05	3.30E-06	2.01E-05	4.62E-05
Indiana	Vigo County	10400	167104	-87.488821	39.46002	4174	U	4.27E-07	1.93E-05	5.56E-06	1.09E-06	1.98E-05	4.62E-05
Indiana	Elkhart Count	598	0395.98	-85.865943	41.589551	8173	R	5.21E-06	8.98E-06	9.32E-06	2.56E-06	2.01E-05	4.61E-05
Indiana	Elkhart Count	698	0396.98	-85.829096	41.652904	4604	R	6.00E-06	9.29E-06	8.17E-06	2.59E-06	2.00E-05	4.60E-05
Indiana	St. Joseph Co	11701	141117.01	-86.141626	41.646398	3717	U	1.85E-06	1.06E-05	1.04E-05	3.10E-06	2.00E-05	4.60E-05
Indiana	Dubois Count	953500	0379535	-86.871594	38.391374	4839	R	6.46E-06	1.54E-05	3.21E-06	8.29E-07	1.99E-05	4.59E-05
Indiana	Steuben Cou	971300	1519713	-85.000163	41.645665	3953	R	1.10E-05	8.55E-06	4.92E-06	1.16E-06	2.01E-05	4.58E-05
Indiana	Shelby Count	710100	1457101	-85.731122	39.670634	3774	U	1.17E-05	4.63E-06	7.38E-06	2.25E-06	1.97E-05	4.57E-05

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Indiana	Decatur Cou	969300	0319693	-85.484671	39.342447	3563	R	2.36E-06	1.50E-05	6.88E-06	1.61E-06	1.98E-05	4.56E-05
Indiana	Delaware Cou	1100	03511	-85.388382	40.21264	3587	U	1.25E-07	1.20E-05	9.19E-06	4.12E-06	2.02E-05	4.56E-05
Indiana	Delaware Cou	1600	03516	-85.389305	40.172437	2777	U	2.50E-07	1.32E-05	8.21E-06	3.76E-06	2.02E-05	4.56E-05
Indiana	Hendricks Co	210101	0632101.01	-86.38224	39.884383	4619	U	5.46E-06	5.67E-06	1.13E-05	3.32E-06	1.98E-05	4.56E-05
Indiana	Tippecanoe C	1100	15711	-86.881712	40.406904	3390	U	5.74E-06	5.93E-06	1.17E-05	2.46E-06	1.97E-05	4.56E-05
Indiana	Brown County	974600	0139746	-86.149992	39.313069	2820	R	6.78E-06	8.01E-06	7.84E-06	3.15E-06	1.98E-05	4.55E-05
Indiana	Howard Coun	100	0671	-86.129071	40.489306	309	U	6.97E-07	9.98E-06	1.46E-05	2.09E-06	1.81E-05	4.55E-05
Indiana	Marshall Cou	20101	099201.01	-86.148911	41.446271	5372	R	2.55E-06	1.45E-05	6.47E-06	1.89E-06	2.01E-05	4.55E-05
Indiana	Morgan Coun	510800	1095108	-86.417358	39.421823	4535	U	3.17E-06	9.22E-06	1.07E-05	2.58E-06	1.98E-05	4.55E-05
Indiana	Monroe Coun	400	1054	-86.55197	39.15377	3994	U	1.44E-07	8.18E-06	1.30E-05	4.19E-06	1.99E-05	4.54E-05
Indiana	Elkhart Count	597	0395.97	-85.839308	41.590756	80	R	4.34E-06	1.01E-05	9.03E-06	2.90E-06	1.87E-05	4.51E-05
Indiana	Hancock Cou	410100	0594101	-85.669118	39.899295	4182	U	9.61E-06	4.73E-06	8.53E-06	2.33E-06	1.97E-05	4.50E-05
Indiana	Lawrence Co	950900	0939509	-86.492517	38.865774	3153	R	2.65E-07	1.51E-05	7.99E-06	1.73E-06	1.98E-05	4.50E-05
Indiana	Madison Cou	11700	095117	-85.74638	39.999431	2199	U	2.81E-06	6.55E-06	1.30E-05	2.88E-06	1.98E-05	4.50E-05
Indiana	Tippecanoe C	1700	15717	-86.849057	40.388394	4259	U	3.59E-06	1.05E-05	8.88E-06	2.02E-06	1.99E-05	4.49E-05
Indiana	Vanderburgh	3300	16333	-87.572526	38.008291	4087	U	7.07E-07	9.14E-06	1.23E-05	2.85E-06	1.99E-05	4.49E-05
Indiana	Delaware Cou	1500	03515	-85.37559	40.170664	3280	U	1.58E-07	1.12E-05	9.31E-06	4.27E-06	1.99E-05	4.48E-05
Indiana	Howard Coun	1200	06712	-86.119067	40.473677	4179	U	1.54E-06	6.47E-06	1.42E-05	2.56E-06	2.01E-05	4.48E-05
Indiana	Jennings Cou	960500	0799605	-85.625677	39.002193	2767	R	2.23E-07	1.58E-05	6.97E-06	1.78E-06	1.99E-05	4.48E-05
Indiana	Vanderburgh	1097	16310.97	-87.537584	37.947631	4478	U	8.70E-07	7.57E-06	1.33E-05	2.96E-06	2.01E-05	4.48E-05
Indiana	Vanderburgh	10201	163102.01	-87.525553	38.059239	3375	U	1.15E-06	8.30E-06	1.19E-05	3.47E-06	1.99E-05	4.48E-05
Indiana	Delaware Cou	200	0352	-85.378709	40.195834	2418	U	1.25E-07	1.13E-05	9.04E-06	4.17E-06	2.01E-05	4.47E-05
Indiana	Delaware Cou	1000	03510	-85.402385	40.208392	4886	U	1.39E-07	8.71E-06	1.02E-05	5.68E-06	2.00E-05	4.47E-05
Indiana	Floyd County	71200	043712	-85.900197	38.252783	2429	U	2.08E-06	8.86E-06	9.92E-06	3.88E-06	2.00E-05	4.47E-05
Indiana	Monroe Coun	600	1056	-86.546446	39.175236	6002	U	2.15E-07	9.06E-06	1.18E-05	3.65E-06	2.00E-05	4.47E-05
Indiana	La Porte Cou	41800	091418	-86.594446	41.684102	4861	U	3.00E-06	1.43E-05	5.43E-06	1.94E-06	2.00E-05	4.46E-05
Indiana	Madison Cou	11200	095112	-85.611966	40.10149	5818	U	2.89E-07	1.25E-05	9.86E-06	2.11E-06	1.98E-05	4.46E-05
Indiana	Huntington Co	991800	0699918	-85.484897	40.872594	3554	U	2.61E-06	1.23E-05	7.39E-06	2.07E-06	2.02E-05	4.45E-05
Indiana	Madison Cou	11600	095116	-85.765415	39.979736	2734	U	2.96E-06	9.80E-06	1.17E-05	2.76E-06	1.73E-05	4.45E-05
Indiana	Hendricks Co	210500	0632105	-86.517513	39.762472	7384	U	8.06E-06	4.75E-06	8.94E-06	2.61E-06	1.99E-05	4.43E-05
Indiana	Vigo County	1600	16716	-87.357214	39.457997	4665	U	5.90E-07	1.08E-05	1.12E-05	1.66E-06	2.01E-05	4.43E-05
Indiana	La Porte Cou	41700	091417	-86.677372	41.714525	3003	U	3.40E-06	1.44E-05	4.62E-06	1.85E-06	1.99E-05	4.42E-05
Indiana	Hendricks Co	211000	0632110	-86.495921	39.668154	4566	U	9.13E-06	4.60E-06	8.18E-06	2.44E-06	1.97E-05	4.41E-05
Indiana	Howard Coun	500	0675	-86.139836	40.491462	4202	U	9.30E-07	4.82E-06	1.54E-05	2.77E-06	2.01E-05	4.40E-05
Indiana	Madison Cou	1600	09516	-85.737796	40.102075	2673	U	2.73E-07	1.19E-05	9.77E-06	2.28E-06	1.98E-05	4.40E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
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Indiana	Hamilton Cou	110503	0571105.03	-86.047493	40.037687	3278	U	3.61E-06	5.25E-06	1.13E-05	3.79E-06	1.99E-05	4.39E-05
Indiana	Henry County	976300	0659763	-85.359812	39.928194	2904	R	1.17E-06	9.00E-06	1.16E-05	2.00E-06	2.01E-05	4.39E-05
Indiana	Monroe Coun	800	1058	-86.518522	39.191037	4970	U	4.50E-07	6.88E-06	1.22E-05	4.28E-06	2.00E-05	4.39E-05
Indiana	Monroe Coun	901	1059.01	-86.503154	39.161577	2566	U	4.36E-07	7.72E-06	1.18E-05	3.72E-06	2.01E-05	4.38E-05
Indiana	Wayne Count	1100	17711	-84.853496	39.826203	5417	U	1.25E-06	1.68E-05	4.63E-06	9.12E-07	2.01E-05	4.38E-05
Indiana	Howard Cour	1000	06710	-86.132712	40.466035	2063	U	1.45E-06	6.45E-06	1.33E-05	2.30E-06	2.01E-05	4.37E-05
Indiana	Huntington Co	991400	0699914	-85.517667	40.886163	3433	U	3.09E-06	1.29E-05	6.05E-06	1.78E-06	1.99E-05	4.37E-05
Indiana	St. Joseph Co	10900	141109	-86.374969	41.678532	5073	U	1.47E-06	1.05E-05	8.63E-06	3.01E-06	2.01E-05	4.37E-05
Indiana	Kosciusko Co	960900	0859609	-85.697471	41.415963	2548	R	5.85E-06	8.09E-06	6.21E-06	3.55E-06	1.99E-05	4.36E-05
Indiana	Tippecanoe Co	800	1578	-86.864441	40.411324	1950	U	3.62E-06	7.28E-06	1.07E-05	2.25E-06	1.98E-05	4.36E-05
Indiana	Vigo County	1300	16713	-87.369613	39.492629	2013	U	5.50E-07	1.30E-05	8.42E-06	1.43E-06	2.02E-05	4.36E-05
Indiana	La Porte Cou	42800	091428	-86.822023	41.47495	2317	U	9.05E-06	8.43E-06	4.20E-06	1.91E-06	1.99E-05	4.35E-05
Indiana	Shelby Count	710800	1457108	-85.762818	39.473843	5088	U	7.91E-06	6.65E-06	6.94E-06	1.88E-06	2.01E-05	4.35E-05
Indiana	Madison Cou	1500	09515	-85.70624	40.126261	4282	U	1.84E-07	8.90E-06	1.16E-05	2.70E-06	1.99E-05	4.33E-05
Indiana	Allen County	10200	003102	-85.01783	41.21514	6688	U	1.15E-06	1.33E-05	6.85E-06	1.80E-06	2.00E-05	4.31E-05
Indiana	Clark County	50701	019507.01	-85.677683	38.354592	2648	U	1.50E-06	8.05E-06	1.03E-05	3.27E-06	1.99E-05	4.31E-05
Indiana	Tippecanoe Co	900	1579	-86.896142	40.408083	2778	U	7.16E-06	5.31E-06	8.80E-06	2.00E-06	1.99E-05	4.31E-05
Indiana	Steuben Cou	971400	1519714	-85.001503	41.624998	3813	R	8.18E-06	8.80E-06	4.91E-06	1.14E-06	2.00E-05	4.30E-05
Indiana	Madison Cou	11300	095113	-85.594401	40.112582	2954	U	1.97E-07	9.14E-06	1.12E-05	2.48E-06	1.99E-05	4.29E-05
Indiana	Tippecanoe Co	400	1574	-86.884775	40.426088	4077	U	2.44E-06	8.37E-06	9.98E-06	2.13E-06	2.00E-05	4.29E-05
Indiana	Vanderburgh	1100	16311	-87.557357	37.954459	3145	U	6.89E-07	6.96E-06	1.26E-05	2.86E-06	1.98E-05	4.29E-05
Indiana	Kosciusko Co	961300	0859613	-85.798388	41.340469	3014	R	7.97E-06	7.80E-06	4.23E-06	2.78E-06	2.00E-05	4.28E-05
Indiana	Marshall Cou	20500	099205	-86.31758	41.348234	3219	R	3.06E-06	8.75E-06	9.08E-06	1.90E-06	2.00E-05	4.28E-05
Indiana	St. Joseph Co	11702	141117.02	-86.186464	41.629802	5214	U	1.80E-06	8.62E-06	9.61E-06	2.87E-06	2.00E-05	4.28E-05
Indiana	Tippecanoe Co	1300	15713	-86.878597	40.391841	4652	U	6.51E-06	5.97E-06	8.46E-06	1.86E-06	2.00E-05	4.28E-05
Indiana	Hamilton Cou	110502	0571105.02	-86.054462	40.080362	7813	U	3.45E-06	4.62E-06	1.09E-05	3.85E-06	1.99E-05	4.27E-05
Indiana	Vanderburgh	3803	16338.03	-87.461159	37.96694	5586	U	5.66E-07	6.24E-06	1.31E-05	2.70E-06	2.00E-05	4.27E-05
Indiana	La Porte Cou	42700	091427	-86.695376	41.504632	4776	U	6.26E-06	1.06E-05	4.30E-06	1.54E-06	1.99E-05	4.26E-05
Indiana	Bartholomew	11200	005112	-85.780058	39.295786	5336	R	3.30E-06	1.32E-05	4.46E-06	1.42E-06	2.00E-05	4.25E-05
Indiana	Delaware Cou	1902	03519.02	-85.408554	40.226118	4671	U	1.38E-07	7.43E-06	1.02E-05	4.73E-06	2.00E-05	4.25E-05
Indiana	Grant County	100	0531	-85.666459	40.558838	5001	U	5.78E-07	1.07E-05	9.12E-06	2.00E-06	2.02E-05	4.25E-05
Indiana	St. Joseph Co	11900	141119	-86.254562	41.592587	3292	U	1.49E-06	8.83E-06	9.14E-06	3.17E-06	1.99E-05	4.25E-05
Indiana	Vanderburgh	3600	16336	-87.5128	37.943702	4839	U	8.24E-07	6.63E-06	1.20E-05	2.81E-06	2.00E-05	4.23E-05
Indiana	Delaware Cou	800	0358	-85.424412	40.191695	4556	U	1.35E-07	1.04E-05	8.13E-06	3.75E-06	1.98E-05	4.22E-05
Indiana	Delaware Cou	1901	03519.01	-85.41918	40.220665	803	U	2.36E-07	8.23E-06	9.98E-06	5.19E-06	1.85E-05	4.22E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
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Indiana	Morgan Coun	510200	1095102	-86.3697	39.583736	4962	U	6.98E-06	5.02E-06	7.96E-06	2.49E-06	1.98E-05	4.22E-05
Indiana	Vigo County	10700	167107	-87.356417	39.387483	10108	U	5.66E-07	1.39E-05	6.57E-06	1.00E-06	2.01E-05	4.21E-05
Indiana	De Kalb Cour	20500	033205	-85.062011	41.367502	5332	U	3.06E-06	1.06E-05	6.62E-06	1.71E-06	2.00E-05	4.20E-05
Indiana	Lawrence Co	951000	0939510	-86.48731	38.872861	3056	R	1.43E-07	1.31E-05	7.07E-06	1.51E-06	2.01E-05	4.20E-05
Indiana	Allen County	10400	003104	-85.247142	41.220908	2592	U	2.54E-06	1.03E-05	6.58E-06	2.28E-06	2.01E-05	4.18E-05
Indiana	Boone County	810603	0118106.03	-86.303081	39.954967	2841	U	4.47E-06	4.78E-06	9.55E-06	3.16E-06	1.99E-05	4.18E-05
Indiana	Dearborn Cou	80400	029804	-84.866319	39.121466	5281	U	1.09E-06	8.51E-06	8.89E-06	3.31E-06	2.00E-05	4.18E-05
Indiana	Miami County	952500	1039525	-86.05786	40.743885	2529	R	1.79E-06	1.40E-05	4.73E-06	1.09E-06	2.01E-05	4.17E-05
Indiana	Boone County	810500	0118105	-86.463839	40.051173	5691	U	1.64E-06	5.90E-06	1.03E-05	3.87E-06	1.99E-05	4.16E-05
Indiana	Elkhart Count	1100	03911	-85.981636	41.469811	4436	R	5.00E-06	6.77E-06	7.25E-06	2.54E-06	2.00E-05	4.16E-05
Indiana	Elkhart Count	1397	03913.97	-85.877006	41.575466	74	R	4.73E-06	8.16E-06	7.95E-06	4.17E-06	1.66E-05	4.16E-05
Indiana	Vanderburgh	10497	163104.97	-87.661011	37.979617	7322	U	5.94E-07	4.86E-06	1.20E-05	4.07E-06	2.01E-05	4.16E-05
Indiana	Allen County	10900	003109	-84.907504	41.135918	5645	U	1.09E-06	1.20E-05	6.39E-06	1.83E-06	2.01E-05	4.15E-05
Indiana	Tippecanoe C	300	1573	-86.865268	40.431945	3259	U	2.21E-06	7.92E-06	9.53E-06	2.04E-06	1.98E-05	4.15E-05
Indiana	Grant County	600	0536	-85.68446	40.56566	3837	U	7.29E-07	9.49E-06	9.18E-06	2.03E-06	2.00E-05	4.14E-05
Indiana	Madison Cou	1800	09518	-85.692158	40.063072	3326	U	1.62E-06	8.00E-06	9.60E-06	2.42E-06	1.98E-05	4.14E-05
Indiana	Madison Cou	11800	095118	-85.818715	39.97164	2863	U	3.99E-06	4.90E-06	1.03E-05	2.69E-06	1.96E-05	4.14E-05
Indiana	Tippecanoe C	5200	15752	-86.91135	40.444453	4652	U	1.84E-06	5.96E-06	1.11E-05	2.52E-06	1.99E-05	4.14E-05
Indiana	Elkhart Count	1000	03910	-85.826841	41.493494	3278	R	5.21E-06	6.44E-06	6.81E-06	2.67E-06	2.02E-05	4.13E-05
Indiana	Hamilton Cou	110400	0571104	-86.147644	40.038034	9272	U	3.53E-06	4.34E-06	1.00E-05	3.37E-06	2.00E-05	4.13E-05
Indiana	Marshall Cou	20400	099204	-86.300843	41.344691	2693	R	2.25E-06	8.52E-06	8.81E-06	1.89E-06	1.99E-05	4.13E-05
Indiana	Morgan Coun	510500	1095105	-86.395198	39.533902	3745	U	6.68E-06	4.72E-06	7.49E-06	2.57E-06	1.98E-05	4.13E-05
Indiana	Huntington Co	991600	0699916	-85.483276	40.889074	3740	U	3.04E-06	1.08E-05	5.73E-06	1.67E-06	2.00E-05	4.12E-05
Indiana	Marshall Cou	20600	099206	-86.311637	41.332261	3943	R	2.19E-06	8.49E-06	8.60E-06	1.88E-06	2.00E-05	4.12E-05
Indiana	Vanderburgh	10100	163101	-87.481549	37.994624	2867	U	6.65E-07	7.44E-06	1.05E-05	2.81E-06	1.99E-05	4.12E-05
Indiana	Boone County	810400	0118104	-86.477901	40.05217	5706	U	1.62E-06	5.86E-06	9.66E-06	3.87E-06	2.01E-05	4.11E-05
Indiana	Floyd County	71102	043711.02	-85.92161	38.304055	5660	U	1.14E-06	6.41E-06	1.06E-05	3.03E-06	1.99E-05	4.11E-05
Indiana	Howard Coun	400	0674	-86.134245	40.506446	3390	U	8.07E-07	4.44E-06	1.32E-05	2.44E-06	2.01E-05	4.10E-05
Indiana	Tippecanoe C	1500	15715	-86.896587	40.380989	4300	U	6.39E-06	5.11E-06	7.90E-06	1.89E-06	1.97E-05	4.10E-05
Indiana	Vanderburgh	10203	163102.03	-87.572841	38.041844	5793	U	6.36E-07	6.59E-06	1.11E-05	2.74E-06	1.99E-05	4.10E-05
Indiana	Morgan Coun	510400	1095104	-86.489811	39.565527	7853	U	6.47E-06	4.11E-06	8.10E-06	2.38E-06	1.99E-05	4.09E-05
Indiana	Noble County	972100	1139721	-85.532045	41.480134	3090	R	1.24E-05	3.26E-06	3.76E-06	1.52E-06	1.99E-05	4.09E-05
Indiana	Clark County	50702	019507.02	-85.761242	38.39172	8085	U	1.42E-06	7.33E-06	9.46E-06	2.58E-06	2.00E-05	4.08E-05
Indiana	Perry County	952500	1239525	-86.758131	37.946029	4647	R	3.59E-06	1.06E-05	5.77E-06	8.19E-07	2.00E-05	4.08E-05
Indiana	Tippecanoe C	700	1577	-86.874842	40.419513	3201	U	3.08E-06	6.67E-06	9.17E-06	1.98E-06	1.99E-05	4.08E-05

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Indiana	Dearborn Cou	80300	029803	-84.866635	39.1041	4607	U	1.08E-06	8.13E-06	8.31E-06	3.18E-06	2.00E-05	4.07E-05
Indiana	Henry County	976600	0659766	-85.358581	39.911439	2374	R	2.09E-06	7.04E-06	9.87E-06	1.67E-06	2.01E-05	4.07E-05
Indiana	Monroe Coun	902	1059.02	-86.484193	39.166414	5943	U	5.13E-07	5.74E-06	1.08E-05	3.56E-06	2.00E-05	4.06E-05
Indiana	Hendricks Co	210300	0632103	-86.464548	39.861529	3453	U	5.04E-06	3.67E-06	9.10E-06	2.85E-06	1.98E-05	4.05E-05
Indiana	Howard Coun	900	0679	-86.134934	40.476917	4802	U	1.19E-06	5.41E-06	1.19E-05	2.13E-06	1.98E-05	4.05E-05
Indiana	St. Joseph Co	12400	141124	-86.13489	41.538425	1814	U	2.62E-06	6.80E-06	7.60E-06	3.45E-06	2.01E-05	4.05E-05
Indiana	Shelby Count	710900	1457109	-85.783228	39.396206	3985	U	5.29E-06	7.43E-06	6.05E-06	1.79E-06	2.00E-05	4.05E-05
Indiana	Allen County	10100	003101	-84.904247	41.218077	3583	U	1.14E-06	1.05E-05	6.85E-06	2.01E-06	1.99E-05	4.04E-05
Indiana	Morgan Coun	510600	1095106	-86.296024	39.44957	7023	U	6.08E-06	4.59E-06	7.28E-06	2.43E-06	1.98E-05	4.02E-05
Indiana	Howard Coun	200	0672	-86.121508	40.492442	4253	U	9.11E-07	4.83E-06	1.21E-05	2.14E-06	2.01E-05	4.01E-05
Indiana	La Porte Cou	42900	091429	-86.857554	41.374992	3693	U	8.98E-06	5.80E-06	3.88E-06	1.61E-06	1.98E-05	4.01E-05
Indiana	Tippecanoe C	600	1576	-86.890518	40.419645	448	U	2.99E-06	9.20E-06	8.26E-06	1.62E-06	1.80E-05	4.01E-05
Indiana	Warrick Coun	30703	173307.03	-87.389896	37.960557	5227	U	7.44E-07	6.99E-06	1.03E-05	1.98E-06	2.00E-05	4.01E-05
Indiana	Marshall Cou	20102	099201.02	-86.152843	41.431934	3271	R	2.28E-06	9.17E-06	6.63E-06	1.84E-06	2.01E-05	4.00E-05
Indiana	Delaware Cou	2100	03521	-85.355353	40.165396	3253	U	1.27E-07	8.04E-06	7.95E-06	3.70E-06	2.00E-05	3.98E-05
Indiana	Elkhart Count	900	0399	-85.717629	41.53949	5497	R	5.53E-06	5.22E-06	6.37E-06	2.52E-06	2.01E-05	3.97E-05
Indiana	Rush County	974500	1399745	-85.528581	39.546906	4361	R	1.28E-05	3.42E-06	2.97E-06	8.36E-07	1.97E-05	3.97E-05
Indiana	Madison Cou	11500	095115	-85.713785	40.010661	7121	U	9.77E-07	6.44E-06	9.88E-06	2.39E-06	1.99E-05	3.96E-05
Indiana	Vanderburgh	3804	16338.04	-87.475715	37.952614	4540	U	5.96E-07	5.38E-06	1.10E-05	2.48E-06	1.99E-05	3.94E-05
Indiana	Howard Coun	600	0676	-86.152447	40.49546	2511	U	7.95E-07	4.28E-06	1.17E-05	2.35E-06	2.01E-05	3.93E-05
Indiana	St. Joseph Co	12000	141120	-86.343098	41.599868	3649	U	1.14E-06	7.68E-06	7.54E-06	2.91E-06	1.99E-05	3.92E-05
Indiana	Wabash Cou	992500	1699925	-85.733867	40.803986	4495	U	1.28E-05	2.40E-06	3.08E-06	9.44E-07	2.00E-05	3.92E-05
Indiana	Noble County	972400	1139724	-85.418169	41.4022	4097	R	9.14E-06	5.16E-06	3.63E-06	1.22E-06	2.00E-05	3.91E-05
Indiana	Wayne Count	700	1777	-84.938797	39.821599	6470	U	9.90E-07	1.23E-05	4.75E-06	9.76E-07	2.01E-05	3.91E-05
Indiana	Delaware Cou	500	0355	-85.411904	40.178933	5020	U	1.46E-07	8.31E-06	7.37E-06	3.35E-06	1.98E-05	3.90E-05
Indiana	Jackson Cou	967700	0719677	-85.904307	38.960337	3653	R	2.66E-07	1.31E-05	4.25E-06	1.38E-06	2.00E-05	3.90E-05
Indiana	Clark County	50902	019509.02	-85.650496	38.464149	3836	U	1.02E-06	6.43E-06	8.90E-06	2.83E-06	1.97E-05	3.89E-05
Indiana	Clinton Count	950700	0239507	-86.501443	40.274451	3139	R	1.68E-06	6.64E-06	8.59E-06	2.05E-06	1.99E-05	3.89E-05
Indiana	Delaware Cou	2200	03522	-85.285905	40.172799	6294	U	1.56E-07	1.15E-05	5.15E-06	2.21E-06	1.99E-05	3.89E-05
Indiana	St. Joseph Co	12200	141122	-86.483433	41.465909	2799	U	8.17E-07	1.06E-05	5.30E-06	2.05E-06	2.01E-05	3.89E-05
Indiana	Whitley Coun	50400	183504	-85.484642	41.165827	4909	U	4.36E-06	8.15E-06	4.87E-06	1.44E-06	2.01E-05	3.89E-05
Indiana	Adams Count	30500	001305	-84.938575	40.710702	4546	U	2.90E-07	1.57E-05	2.29E-06	6.12E-07	1.99E-05	3.88E-05
Indiana	Clark County	50901	019509.01	-85.681078	38.455875	6114	U	1.05E-06	5.96E-06	9.07E-06	2.72E-06	2.00E-05	3.88E-05
Indiana	Monroe Coun	1100	10511	-86.535194	39.131821	7905	U	1.51E-07	6.36E-06	9.58E-06	2.85E-06	1.99E-05	3.88E-05
Indiana	Vigo County	10200	167102	-87.361201	39.551096	7490	U	4.99E-07	8.35E-06	8.51E-06	1.47E-06	1.99E-05	3.88E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
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Indiana	Kosciusko Co	961500	0859615	-85.694729	41.306483	2515	R	6.12E-06	4.31E-06	5.14E-06	3.00E-06	2.01E-05	3.87E-05
Indiana	Daviess Cour	954800	0279548	-87.172068	38.657037	3380	R	4.45E-07	8.78E-06	8.18E-06	1.23E-06	1.99E-05	3.86E-05
Indiana	Dearborn Cou	80100	029801	-84.902697	39.197654	6875	U	1.07E-06	5.76E-06	8.71E-06	3.29E-06	1.98E-05	3.86E-05
Indiana	Kosciusko Co	961000	0859610	-85.740528	41.410128	4224	R	5.86E-06	5.18E-06	4.81E-06	2.79E-06	2.00E-05	3.86E-05
Indiana	Kosciusko Co	961600	0859616	-85.725207	41.290053	1552	R	7.54E-06	3.74E-06	4.47E-06	2.68E-06	2.01E-05	3.86E-05
Indiana	Kosciusko Co	962200	0859622	-85.723757	41.216847	4124	R	7.51E-06	4.18E-06	3.87E-06	2.87E-06	2.01E-05	3.86E-05
Indiana	Lagrange Cou	970200	0879702	-85.419941	41.645437	4410	R	5.46E-06	3.48E-06	5.22E-06	4.20E-06	2.02E-05	3.86E-05
Indiana	Steuben Cour	970800	1519708	-84.904184	41.732428	2540	R	1.09E-05	3.96E-06	2.65E-06	7.92E-07	2.01E-05	3.85E-05
Indiana	Cass County	951500	0179515	-86.352766	40.755111	4354	R	7.00E-07	8.05E-06	8.40E-06	1.23E-06	2.00E-05	3.84E-05
Indiana	Dearborn Cou	80200	029802	-84.896118	39.253561	6269	U	9.77E-07	5.50E-06	8.99E-06	3.22E-06	1.97E-05	3.84E-05
Indiana	Hamilton Cou	110100	0571101	-85.922097	40.106208	4521	U	2.46E-06	4.03E-06	8.97E-06	2.98E-06	1.99E-05	3.84E-05
Indiana	Howard Cour	1100	06711	-86.135959	40.448287	4321	U	9.91E-07	4.33E-06	1.10E-05	2.01E-06	2.01E-05	3.84E-05
Indiana	Howard Cour	1300	06713	-86.099919	40.472097	3055	U	1.89E-06	3.58E-06	1.09E-05	2.08E-06	2.00E-05	3.84E-05
Indiana	Madison Cou	11100	095111	-85.823261	40.071065	3544	U	1.69E-06	5.71E-06	8.64E-06	2.53E-06	1.99E-05	3.84E-05
Indiana	Madison Cou	11400	095114	-85.629648	40.002388	3686	U	6.58E-07	7.18E-06	8.50E-06	2.14E-06	1.99E-05	3.84E-05
Indiana	Miami County	952100	1039521	-86.078131	40.784718	4471	R	1.82E-06	1.24E-05	3.23E-06	8.65E-07	2.01E-05	3.84E-05
Indiana	Whitley Coun	50500	183505	-85.494979	41.142731	3799	U	4.08E-06	8.12E-06	4.86E-06	1.42E-06	1.99E-05	3.84E-05
Indiana	Noble County	972300	1139723	-85.575858	41.371016	3980	R	8.77E-06	4.08E-06	3.98E-06	1.52E-06	1.99E-05	3.82E-05
Indiana	St. Joseph Co	12100	141121	-86.418798	41.528716	2994	U	1.03E-06	8.40E-06	6.40E-06	2.52E-06	1.99E-05	3.82E-05
Indiana	Starke County	953600	1499536	-86.501894	41.407406	2588	R	1.19E-06	1.21E-05	3.86E-06	1.21E-06	1.98E-05	3.82E-05
Indiana	Allen County	11900	003119	-84.858648	40.971421	1951	U	7.59E-07	1.01E-05	5.40E-06	2.08E-06	1.98E-05	3.81E-05
Indiana	Floyd County	71003	043710.03	-85.877718	38.360241	5297	U	1.10E-06	5.29E-06	9.22E-06	2.58E-06	1.99E-05	3.81E-05
Indiana	Greene Coun	955100	0559551	-87.172171	39.037827	3310	R	5.37E-07	9.12E-06	6.62E-06	1.86E-06	2.00E-05	3.81E-05
Indiana	Knox County	955400	0839554	-87.520991	38.678483	1969	U	1.43E-06	7.66E-06	6.35E-06	2.46E-06	2.02E-05	3.81E-05
Indiana	Allen County	11701	003117.01	-85.272307	40.962646	2482	U	9.76E-07	9.29E-06	5.82E-06	2.11E-06	1.98E-05	3.80E-05
Indiana	Henry County	976400	0659764	-85.37261	39.906056	4373	R	3.46E-06	5.40E-06	7.78E-06	1.37E-06	2.00E-05	3.80E-05
Indiana	Howard Cour	300	0673	-86.120995	40.509233	3403	U	7.86E-07	3.70E-06	1.14E-05	2.06E-06	2.01E-05	3.80E-05
Indiana	Whitley Coun	50600	183506	-85.393229	41.138548	1822	U	3.20E-06	9.08E-06	4.33E-06	1.44E-06	2.00E-05	3.80E-05
Indiana	De Kalb Cour	20400	033204	-85.037224	41.368493	4987	U	2.93E-06	8.07E-06	5.53E-06	1.46E-06	1.99E-05	3.79E-05
Indiana	Delaware Cou	1700	03517	-85.413639	40.16021	1495	U	3.47E-07	7.77E-06	6.75E-06	3.12E-06	1.99E-05	3.79E-05
Indiana	Floyd County	71101	043711.01	-85.974258	38.312242	4092	U	1.01E-06	5.42E-06	8.76E-06	2.56E-06	2.01E-05	3.79E-05
Indiana	Greene Coun	955200	0559552	-87.158534	39.035706	2289	R	5.69E-07	8.65E-06	6.81E-06	1.88E-06	2.00E-05	3.79E-05
Indiana	Howard Cour	1400	06714	-86.111273	40.446827	4331	U	1.04E-06	4.18E-06	1.08E-05	1.98E-06	1.99E-05	3.79E-05
Indiana	Noble County	971900	1139719	-85.274676	41.437104	3911	R	5.89E-06	5.96E-06	4.73E-06	1.28E-06	2.00E-05	3.78E-05
Indiana	Kosciusko Co	961400	0859614	-85.69572	41.344877	2701	R	6.09E-06	3.93E-06	4.93E-06	2.76E-06	2.00E-05	3.77E-05

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Indiana	Montgomery Co	957200	1079572	-86.894593	40.030122	3842	R	1.78E-06	8.72E-06	6.04E-06	1.22E-06	2.00E-05	3.77E-05
Indiana	Warrick County	30800	173308	-87.412273	37.949129	5583	U	7.42E-07	5.23E-06	9.84E-06	1.84E-06	2.00E-05	3.77E-05
Indiana	Wayne County	10100	177101	-84.902478	39.890734	3019	U	2.91E-06	1.05E-05	3.64E-06	8.74E-07	1.98E-05	3.77E-05
Indiana	St. Joseph Co	12300	141123	-86.271624	41.525464	3339	U	1.30E-06	6.88E-06	6.73E-06	2.65E-06	2.00E-05	3.76E-05
Indiana	Dearborn County	80500	029805	-84.908971	39.058785	4193	U	1.11E-06	6.88E-06	7.20E-06	2.69E-06	1.96E-05	3.75E-05
Indiana	Kosciusko Co	962400	0859624	-85.972702	41.192649	3374	R	5.52E-06	3.35E-06	4.26E-06	4.23E-06	2.01E-05	3.75E-05
Indiana	Steuben County	971000	1519710	-85.121321	41.704872	2835	R	1.13E-05	2.34E-06	2.79E-06	9.32E-07	2.01E-05	3.75E-05
Indiana	Tippecanoe Co	10800	157108	-86.825509	40.440574	3336	U	1.55E-06	4.71E-06	9.17E-06	2.06E-06	2.00E-05	3.75E-05
Indiana	Hamilton County	110202	0571102.02	-86.023574	40.127929	4375	U	3.05E-06	3.46E-06	8.14E-06	2.81E-06	1.99E-05	3.74E-05
Indiana	Vigo County	11000	167110	-87.448858	39.317013	3679	U	6.57E-07	1.02E-05	5.40E-06	1.18E-06	1.99E-05	3.74E-05
Indiana	Monroe County	700	1057	-86.526253	39.218179	2773	U	4.47E-07	4.71E-06	8.82E-06	3.33E-06	2.00E-05	3.73E-05
Indiana	Cass County	951300	0179513	-86.377546	40.7539	3115	R	6.88E-07	8.77E-06	6.16E-06	1.33E-06	2.03E-05	3.72E-05
Indiana	Madison County	10200	095102	-85.84105	40.280178	5774	U	2.31E-07	6.91E-06	8.31E-06	1.83E-06	1.99E-05	3.72E-05
Indiana	Madison County	11000	095110	-85.802628	40.130243	1954	U	9.83E-07	5.35E-06	8.22E-06	2.55E-06	2.01E-05	3.72E-05
Indiana	Monroe County	500	1055	-86.586991	39.144161	6457	U	3.85E-08	4.74E-06	9.35E-06	3.04E-06	2.00E-05	3.72E-05
Indiana	Montgomery Co	957000	1079570	-86.909016	40.041218	4939	R	1.35E-06	8.39E-06	6.30E-06	1.12E-06	2.01E-05	3.72E-05
Indiana	Henry County	976100	0659761	-85.359171	39.937739	2486	R	9.58E-07	6.33E-06	7.94E-06	1.86E-06	2.01E-05	3.71E-05
Indiana	Madison County	10700	095107	-85.638549	40.178571	3801	U	1.64E-07	6.87E-06	8.30E-06	2.02E-06	1.98E-05	3.71E-05
Indiana	Perry County	952600	1239526	-86.731691	37.914599	2604	R	2.69E-06	9.62E-06	3.74E-06	7.58E-07	2.03E-05	3.71E-05
Indiana	Boone County	810300	0118103	-86.461452	40.055404	3090	U	2.10E-06	3.81E-06	8.23E-06	2.98E-06	1.99E-05	3.70E-05
Indiana	Tippecanoe Co	5100	15751	-86.912021	40.459683	6612	U	1.29E-06	4.77E-06	8.92E-06	2.18E-06	1.98E-05	3.70E-05
Indiana	Vanderburgh	10500	163105	-87.64087	38.043676	7063	U	5.34E-07	3.94E-06	1.00E-05	2.40E-06	2.00E-05	3.70E-05
Indiana	Delaware County	2401	03524.01	-85.483974	40.173942	5393	U	2.59E-07	5.17E-06	8.08E-06	3.23E-06	2.02E-05	3.69E-05
Indiana	Adams County	30700	001307	-84.941316	40.615219	5287	U	2.69E-07	1.38E-05	2.08E-06	5.69E-07	2.01E-05	3.68E-05
Indiana	Vermillion Co	20500	165205	-87.404348	39.657617	5040	R	5.45E-07	9.22E-06	6.25E-06	7.60E-07	1.99E-05	3.67E-05
Indiana	Vigo County	10300	167103	-87.458694	39.548222	4330	U	4.02E-07	9.25E-06	5.88E-06	1.16E-06	2.00E-05	3.67E-05
Indiana	Clay County	40100	021401	-87.135221	39.523818	4719	R	5.23E-07	7.30E-06	7.75E-06	1.02E-06	2.00E-05	3.66E-05
Indiana	Delaware County	2402	03524.02	-85.475353	40.200438	5281	U	1.27E-07	5.53E-06	7.62E-06	3.18E-06	2.02E-05	3.66E-05
Indiana	Henry County	976700	0659767	-85.522898	39.80583	4081	R	4.41E-06	4.67E-06	6.36E-06	1.59E-06	1.95E-05	3.66E-05
Indiana	Howard County	700	0677	-86.159578	40.484812	4557	U	8.84E-07	3.56E-06	1.00E-05	2.01E-06	2.01E-05	3.66E-05
Indiana	Washington Co	967500	1759675	-86.102919	38.607268	3563	R	4.70E-07	9.67E-06	5.23E-06	1.14E-06	2.01E-05	3.66E-05
Indiana	Harrison County	60500	061605	-86.019646	38.213527	4599	U	1.82E-06	6.09E-06	6.77E-06	2.04E-06	1.98E-05	3.65E-05
Indiana	Henry County	976000	0659760	-85.373114	39.92883	3876	R	1.27E-06	5.90E-06	7.84E-06	1.34E-06	2.01E-05	3.65E-05
Indiana	Ohio County	965700	1159657	-84.856872	38.951076	2538	U	1.04E-06	5.41E-06	7.57E-06	2.49E-06	1.99E-05	3.64E-05
Indiana	Vanderburgh	10402	163104.02	-87.650298	37.932134	1385	U	5.57E-07	4.00E-06	8.36E-06	3.44E-06	2.00E-05	3.64E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
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Indiana	Kosciusko Co	961200	0859612	-85.967915	41.303401	4183	R	5.66E-06	3.66E-06	4.25E-06	2.85E-06	1.99E-05	3.63E-05
Indiana	Lagrange Cou	970600	0879706	-85.37915	41.54064	2244	R	4.42E-06	3.50E-06	5.03E-06	3.26E-06	2.01E-05	3.63E-05
Indiana	Monroe Coun	1302	10513.02	-86.610821	39.227093	7278	U	8.18E-08	4.11E-06	9.10E-06	3.11E-06	1.99E-05	3.63E-05
Indiana	Vigo County	10600	167106	-87.287277	39.480807	4554	U	6.64E-07	6.00E-06	7.90E-06	1.69E-06	2.00E-05	3.63E-05
Indiana	Henry County	976500	0659765	-85.358381	39.921252	2690	R	1.55E-06	5.24E-06	8.02E-06	1.39E-06	2.00E-05	3.62E-05
Indiana	Vanderburgh	10700	163107	-87.53854	38.103836	4745	U	4.58E-07	4.66E-06	8.65E-06	2.32E-06	2.01E-05	3.62E-05
Indiana	De Kalb Cour	20700	033207	-85.095585	41.303181	2924	U	2.05E-06	7.68E-06	4.89E-06	1.39E-06	2.01E-05	3.61E-05
Indiana	Warrick Coun	30702	173307.02	-87.415022	37.966446	3259	U	5.67E-07	4.87E-06	8.85E-06	1.79E-06	2.00E-05	3.61E-05
Indiana	Wells County	40600	179406	-85.180352	40.73521	4508	U	3.55E-07	8.42E-06	5.79E-06	1.36E-06	2.01E-05	3.61E-05
Indiana	Whitley Coun	50700	183507	-85.430987	41.051402	2844	U	2.12E-06	8.29E-06	4.34E-06	1.40E-06	1.99E-05	3.61E-05
Indiana	Rush County	974300	1399743	-85.452341	39.614693	3442	R	3.98E-06	5.47E-06	5.49E-06	1.23E-06	1.98E-05	3.60E-05
Indiana	Lagrange Cou	970300	0879703	-85.587598	41.700303	5446	R	5.68E-06	3.14E-06	4.31E-06	2.94E-06	1.99E-05	3.59E-05
Indiana	Delaware Cou	901	0359.01	-85.426862	40.210171	6424	U	1.72E-07	5.72E-06	6.84E-06	3.02E-06	2.00E-05	3.58E-05
Indiana	Rush County	974200	1399742	-85.551736	39.719922	3651	R	6.66E-06	3.41E-06	4.60E-06	1.18E-06	1.99E-05	3.57E-05
Indiana	Tippecanoe Co	1600	15716	-86.894347	40.356928	3058	U	1.42E-06	3.88E-06	7.95E-06	2.54E-06	2.00E-05	3.57E-05
Indiana	Kosciusko Co	961100	0859611	-85.896841	41.407143	4558	R	4.09E-06	4.07E-06	4.61E-06	2.92E-06	1.99E-05	3.56E-05
Indiana	Hamilton Cou	110201	0571102.01	-86.042586	40.177376	4072	U	2.32E-06	2.97E-06	7.38E-06	2.67E-06	2.02E-05	3.55E-05
Indiana	Madison Cou	10900	095109	-85.772794	40.220787	2182	U	1.86E-07	4.31E-06	8.86E-06	2.22E-06	1.99E-05	3.55E-05
Indiana	Monroe Coun	1301	10513.01	-86.62125	39.23295	5292	U	1.47E-07	3.89E-06	8.49E-06	2.94E-06	1.99E-05	3.54E-05
Indiana	Jefferson Cou	966500	0779665	-85.381862	38.76317	5121	U	1.97E-07	8.30E-06	5.54E-06	1.23E-06	2.01E-05	3.53E-05
Indiana	Rush County	974400	1399744	-85.438314	39.615562	3067	R	3.88E-06	5.33E-06	5.04E-06	1.23E-06	1.98E-05	3.53E-05
Indiana	Starke County	954000	1499540	-86.621972	41.293005	3860	R	3.37E-06	5.80E-06	5.06E-06	1.18E-06	1.99E-05	3.53E-05
Indiana	Harrison Cou	60400	061604	-86.113844	38.204166	5443	U	1.26E-06	6.06E-06	6.34E-06	1.68E-06	1.99E-05	3.52E-05
Indiana	Hendricks Co	211100	0632111	-86.626635	39.673467	3127	U	4.71E-06	2.77E-06	6.15E-06	1.98E-06	1.96E-05	3.52E-05
Indiana	Jasper Count	990900	0739909	-87.181588	41.201771	5728	R	8.21E-06	2.64E-06	3.37E-06	1.29E-06	1.97E-05	3.52E-05
Indiana	Noble County	972000	1139720	-85.368315	41.491771	3168	R	5.73E-06	4.43E-06	3.57E-06	1.40E-06	2.00E-05	3.52E-05
Indiana	Noble County	972600	1139726	-85.453713	41.303411	3339	R	3.48E-06	5.76E-06	4.42E-06	1.42E-06	2.01E-05	3.52E-05
Indiana	Perry County	952400	1239524	-86.76114	37.96166	4350	R	2.94E-06	7.32E-06	4.13E-06	7.81E-07	2.01E-05	3.52E-05
Indiana	Boone County	810601	0118106.01	-86.315731	40.014235	3076	U	3.40E-06	2.59E-06	7.21E-06	2.47E-06	1.95E-05	3.51E-05
Indiana	Cass County	951600	0179516	-86.33147	40.755484	5551	R	7.23E-07	6.24E-06	6.84E-06	1.26E-06	2.00E-05	3.51E-05
Indiana	Clinton Count	950800	0239508	-86.51429	40.27616	3178	R	1.60E-06	5.29E-06	6.76E-06	1.33E-06	2.01E-05	3.51E-05
Indiana	Dubois Count	953800	0379538	-86.954539	38.297133	5280	R	2.13E-06	7.09E-06	4.44E-06	1.26E-06	2.02E-05	3.51E-05
Indiana	Hendricks Co	210400	0632104	-86.601981	39.843695	4388	U	4.16E-06	2.47E-06	6.79E-06	2.09E-06	1.96E-05	3.51E-05
Indiana	Howard Cour	1500	06715	-86.119315	40.426228	3669	U	8.52E-07	3.22E-06	9.31E-06	1.78E-06	2.00E-05	3.51E-05
Indiana	Montgomery C	957100	1079571	-86.884627	40.041712	4511	R	9.90E-07	7.30E-06	5.66E-06	1.08E-06	2.00E-05	3.51E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
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Indiana	Noble County	971700	1139717	-85.247535	41.460429	4301	R	4.83E-06	4.74E-06	4.43E-06	1.19E-06	1.99E-05	3.51E-05
Indiana	Whitley Coun	50100	183501	-85.344753	41.231463	5017	U	2.56E-06	6.94E-06	4.44E-06	1.35E-06	1.98E-05	3.51E-05
Indiana	Lawrence Co	951300	0939513	-86.472362	38.732534	4129	R	4.40E-08	7.60E-06	5.40E-06	1.82E-06	2.01E-05	3.50E-05
Indiana	Howard Coun	800	0678	-86.158567	40.459074	5601	U	9.66E-07	3.45E-06	8.77E-06	1.69E-06	2.00E-05	3.49E-05
Indiana	Wells County	40100	179401	-85.161521	40.878931	4961	U	6.09E-07	1.00E-05	3.49E-06	1.13E-06	1.97E-05	3.49E-05
Indiana	Blackford Cou	975300	0099753	-85.369596	40.446711	3563	U	7.48E-07	6.44E-06	5.98E-06	1.62E-06	2.00E-05	3.48E-05
Indiana	De Kalb Cour	20600	033206	-85.133653	41.348171	6522	U	2.47E-06	6.48E-06	4.54E-06	1.29E-06	2.00E-05	3.47E-05
Indiana	Knox County	955300	0839553	-87.51807	38.688337	5137	U	1.47E-06	6.10E-06	5.06E-06	2.02E-06	2.01E-05	3.47E-05
Indiana	Lagrange Cou	970100	0879701	-85.363813	41.706807	5746	R	4.87E-06	2.58E-06	3.90E-06	3.16E-06	2.02E-05	3.47E-05
Indiana	Orange Coun	951700	1179517	-86.467569	38.555379	3216	R	5.28E-07	8.56E-06	4.79E-06	8.72E-07	2.00E-05	3.47E-05
Indiana	Clinton Count	950600	0239506	-86.499268	40.285074	3375	R	1.44E-06	4.51E-06	7.11E-06	1.54E-06	2.00E-05	3.46E-05
Indiana	Delaware Cou	2601	03526.01	-85.396356	40.260004	7100	U	2.00E-07	5.29E-06	6.36E-06	2.73E-06	1.99E-05	3.45E-05
Indiana	Blackford Cou	975200	0099752	-85.369032	40.459587	3096	U	1.23E-06	6.01E-06	5.73E-06	1.46E-06	2.00E-05	3.44E-05
Indiana	Decatur Cour	969100	0319691	-85.608802	39.35307	3415	R	6.40E-06	4.41E-06	3.14E-06	8.97E-07	1.96E-05	3.44E-05
Indiana	Grant County	200	0532	-85.659554	40.541769	5481	U	4.54E-07	5.64E-06	6.80E-06	1.48E-06	2.00E-05	3.44E-05
Indiana	Madison Cou	10800	095108	-85.705461	40.164566	3343	U	1.98E-07	5.00E-06	7.21E-06	2.03E-06	2.00E-05	3.44E-05
Indiana	Wells County	40500	179405	-85.161707	40.730663	2779	U	3.36E-07	7.82E-06	5.05E-06	1.20E-06	2.00E-05	3.44E-05
Indiana	Cass County	951200	0179512	-86.369138	40.764503	2130	R	6.27E-07	5.90E-06	6.10E-06	1.48E-06	2.02E-05	3.43E-05
Indiana	Floyd County	71004	043710.04	-85.972376	38.378799	3229	U	7.45E-07	3.94E-06	7.24E-06	2.36E-06	2.00E-05	3.43E-05
Indiana	Cass County	951400	0179514	-86.370503	40.74484	2231	R	9.02E-07	5.98E-06	6.25E-06	1.00E-06	2.01E-05	3.42E-05
Indiana	De Kalb Cour	20200	033202	-85.054677	41.423829	4010	U	2.80E-06	5.31E-06	4.70E-06	1.27E-06	2.01E-05	3.42E-05
Indiana	Henry County	975800	0659758	-85.537317	40.047209	4568	R	3.38E-07	5.84E-06	6.35E-06	1.63E-06	2.00E-05	3.42E-05
Indiana	Brown County	974800	0139748	-86.201299	39.233565	3794	R	2.26E-06	5.89E-06	4.56E-06	1.67E-06	1.97E-05	3.41E-05
Indiana	Clark County	50802	019508.02	-85.766053	38.526504	5754	U	8.44E-07	4.66E-06	6.49E-06	2.10E-06	2.00E-05	3.41E-05
Indiana	Jackson Cour	967500	0719675	-85.860719	38.965036	4820	R	2.46E-07	1.03E-05	3.10E-06	7.40E-07	1.98E-05	3.41E-05
Indiana	Jefferson Cou	966600	0779666	-85.381393	38.736874	2635	U	1.85E-07	7.91E-06	4.84E-06	1.08E-06	2.00E-05	3.41E-05
Indiana	Lagrange Cou	970500	0879705	-85.399164	41.584787	2575	R	5.50E-06	2.21E-06	3.68E-06	2.81E-06	1.99E-05	3.41E-05
Indiana	Gibson Count	50500	051505	-87.56726	38.353629	8895	R	3.05E-06	4.29E-06	5.35E-06	1.18E-06	2.01E-05	3.40E-05
Indiana	Vanderburgh	10600	163106	-87.652524	38.109474	1684	U	4.26E-07	2.76E-06	7.77E-06	2.90E-06	2.01E-05	3.40E-05
Indiana	Clark County	51000	019510	-85.56541	38.549493	3755	U	8.14E-07	4.62E-06	6.44E-06	2.16E-06	1.99E-05	3.39E-05
Indiana	Noble County	972500	1139725	-85.251422	41.333985	4569	R	2.89E-06	5.68E-06	4.17E-06	1.26E-06	1.99E-05	3.39E-05
Indiana	Wells County	40300	179403	-85.15013	40.743161	3436	U	3.55E-07	8.00E-06	4.46E-06	1.11E-06	2.00E-05	3.39E-05
Indiana	Whitley Coun	50200	183502	-85.505971	41.243954	4355	U	3.09E-06	5.58E-06	4.00E-06	1.28E-06	2.00E-05	3.39E-05
Indiana	Marshall Cou	20202	099202.02	-86.414806	41.423378	2501	R	1.15E-06	7.05E-06	4.45E-06	1.43E-06	1.97E-05	3.38E-05
Indiana	Marshall Cou	20301	099203.01	-86.400512	41.324889	3587	R	1.89E-06	6.17E-06	4.48E-06	1.19E-06	2.01E-05	3.38E-05

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								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Steuben Cou	971200	1519712	-84.892059	41.627275	2464	R	7.94E-06	2.54E-06	2.54E-06	7.65E-07	2.00E-05	3.38E-05
Indiana	Warrick Coun	30701	173307.01	-87.384795	37.986322	7569	U	5.52E-07	4.47E-06	7.29E-06	1.61E-06	1.98E-05	3.38E-05
Indiana	Wayne Count	10200	177102	-84.891062	39.950196	3102	U	1.37E-06	8.26E-06	3.46E-06	8.40E-07	1.99E-05	3.38E-05
Indiana	Howard Coun	10200	067102	-86.065813	40.473755	6064	U	1.17E-06	2.80E-06	8.15E-06	1.62E-06	1.99E-05	3.37E-05
Indiana	Morgan Coun	511000	1095110	-86.530733	39.440389	5865	U	2.77E-06	3.34E-06	5.91E-06	1.90E-06	1.98E-05	3.37E-05
Indiana	Wells County	40200	179402	-85.282504	40.848924	3472	U	1.37E-06	7.87E-06	3.31E-06	1.00E-06	2.02E-05	3.37E-05
Indiana	Huntington Co	991300	0699913	-85.466166	40.964712	4013	U	2.07E-06	6.68E-06	3.74E-06	1.22E-06	1.99E-05	3.36E-05
Indiana	Marshall Cou	20201	099202.01	-86.307164	41.432863	3868	R	1.58E-06	5.72E-06	4.69E-06	1.44E-06	2.01E-05	3.36E-05
Indiana	Franklin Cour	969700	0479697	-85.004189	39.423794	2869	R	1.93E-06	5.39E-06	4.87E-06	1.58E-06	1.97E-05	3.35E-05
Indiana	Hamilton Cou	110300	0571103	-86.204158	40.141212	4504	U	1.80E-06	2.55E-06	6.85E-06	2.54E-06	1.98E-05	3.35E-05
Indiana	Harrison Cou	60600	061606	-86.041254	38.096955	5621	U	1.69E-06	4.29E-06	5.99E-06	1.95E-06	1.95E-05	3.35E-05
Indiana	Kosciusko Co	962700	0859627	-85.912888	41.077066	2544	R	4.32E-06	3.23E-06	3.38E-06	2.60E-06	2.00E-05	3.35E-05
Indiana	Decatur Cour	969200	0319692	-85.50039	39.341403	3759	R	3.36E-06	5.06E-06	3.89E-06	9.54E-07	2.01E-05	3.34E-05
Indiana	Delaware Cou	2302	03523.02	-85.522986	40.119771	3899	U	1.79E-07	4.89E-06	6.32E-06	2.05E-06	1.99E-05	3.34E-05
Indiana	Grant County	900	0539	-85.640722	40.523256	3521	U	4.73E-07	4.22E-06	7.06E-06	1.67E-06	2.00E-05	3.34E-05
Indiana	Warrick Cour	30600	173306	-87.269929	38.046856	8008	U	5.19E-07	4.67E-06	6.77E-06	1.36E-06	2.01E-05	3.34E-05
Indiana	Boone County	810700	0118107	-86.542424	39.956257	4397	U	2.65E-06	2.41E-06	6.72E-06	2.09E-06	1.95E-05	3.33E-05
Indiana	Jefferson Cou	966400	0779664	-85.407138	38.756295	5915	U	1.70E-07	7.56E-06	4.67E-06	9.66E-07	1.99E-05	3.33E-05
Indiana	Kosciusko Co	962500	0859625	-85.944894	41.139825	2515	R	4.19E-06	2.68E-06	3.29E-06	3.01E-06	2.01E-05	3.33E-05
Indiana	Clinton Count	950500	0239505	-86.519928	40.287965	4685	R	1.60E-06	3.97E-06	6.34E-06	1.49E-06	1.97E-05	3.31E-05
Indiana	Harrison Cou	60300	061603	-86.171481	38.206029	2796	U	1.03E-06	5.50E-06	5.55E-06	1.43E-06	1.96E-05	3.31E-05
Indiana	Scott County	967000	1439670	-85.779407	38.688058	4744	U	1.03E-07	6.43E-06	5.53E-06	1.09E-06	1.98E-05	3.30E-05
Indiana	Grant County	400	0534	-85.650321	40.566789	4765	U	5.96E-07	4.60E-06	6.25E-06	1.54E-06	1.99E-05	3.29E-05
Indiana	Kosciusko Co	962600	0859626	-85.765046	41.120543	3240	R	4.68E-06	2.47E-06	3.27E-06	2.49E-06	2.00E-05	3.29E-05
Indiana	Delaware Cou	2301	03523.01	-85.391849	40.121496	3458	U	1.60E-07	4.55E-06	5.80E-06	2.20E-06	2.01E-05	3.28E-05
Indiana	Tippecanoe Co	10202	157102.02	-86.945937	40.464389	7495	U	9.56E-07	3.29E-06	7.09E-06	1.72E-06	1.97E-05	3.28E-05
Indiana	Vermillion Co	20400	165204	-87.445321	39.640716	1974	R	4.22E-07	7.56E-06	4.24E-06	7.12E-07	1.99E-05	3.28E-05
Indiana	Warrick Coun	30400	173304	-87.366032	38.042903	4268	U	3.99E-07	4.50E-06	6.57E-06	1.57E-06	1.98E-05	3.28E-05
Indiana	Wells County	40400	179404	-85.166304	40.75492	2870	U	3.88E-07	7.78E-06	3.68E-06	9.67E-07	2.00E-05	3.28E-05
Indiana	Brown County	974700	0139747	-86.292325	39.290219	3480	R	1.30E-06	4.85E-06	4.92E-06	1.82E-06	1.98E-05	3.27E-05
Indiana	Franklin Cour	969600	0479696	-84.899351	39.385744	4930	R	1.97E-06	3.72E-06	5.25E-06	2.01E-06	1.98E-05	3.27E-05
Indiana	Henry County	975700	0659757	-85.487755	39.948004	4315	R	2.33E-06	4.07E-06	5.17E-06	1.31E-06	1.98E-05	3.27E-05
Indiana	Henry County	975900	0659759	-85.394777	39.912962	4069	R	2.76E-06	3.60E-06	5.29E-06	1.28E-06	1.98E-05	3.27E-05
Indiana	Howard Cour	10600	067106	-86.160188	40.429915	3061	U	8.40E-07	2.55E-06	7.56E-06	1.77E-06	2.00E-05	3.27E-05
Indiana	Grant County	10500	053105	-85.608012	40.487173	5999	U	5.60E-07	3.95E-06	6.39E-06	1.72E-06	2.00E-05	3.26E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
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Indiana	Monroe Coun	1500	10515	-86.515498	39.064441	6100	U	4.46E-08	4.04E-06	6.47E-06	2.08E-06	2.00E-05	3.26E-05
Indiana	Newton Coun	990400	1119904	-87.3753	41.145538	5035	R	4.75E-06	3.02E-06	3.43E-06	1.76E-06	1.96E-05	3.26E-05
Indiana	Ripley County	968500	1379685	-85.227123	39.288544	4318	R	2.21E-06	6.01E-06	3.59E-06	8.02E-07	1.99E-05	3.25E-05
Indiana	Vigo County	10100	167101	-87.299237	39.529731	5431	U	4.76E-07	4.79E-06	6.03E-06	1.13E-06	2.01E-05	3.25E-05
Indiana	De Kalb Cour	20800	033208	-84.91487	41.312458	3424	U	1.74E-06	5.43E-06	3.94E-06	1.15E-06	2.01E-05	3.24E-05
Indiana	Starke County	954200	1499542	-86.807289	41.212924	4417	R	5.52E-06	3.13E-06	2.96E-06	8.46E-07	1.99E-05	3.24E-05
Indiana	Delaware Cou	2700	03527	-85.263146	40.297851	4956	U	3.01E-07	5.05E-06	5.03E-06	1.99E-06	1.99E-05	3.23E-05
Indiana	Grant County	700	0537	-85.686914	40.551381	4328	U	4.33E-07	3.92E-06	6.41E-06	1.53E-06	2.00E-05	3.23E-05
Indiana	Wabash Cour	992200	1699922	-85.771128	41.004365	5576	U	2.37E-06	4.25E-06	4.34E-06	1.36E-06	2.00E-05	3.23E-05
Indiana	Warrick Coun	30300	173303	-87.429595	38.076263	620	U	4.32E-07	3.99E-06	5.83E-06	2.06E-06	2.00E-05	3.23E-05
Indiana	Decatur Cour	969000	0319690	-85.406832	39.384412	3973	R	4.16E-06	4.87E-06	2.62E-06	6.38E-07	2.00E-05	3.22E-05
Indiana	Dubois Count	953200	0379532	-86.991209	38.408175	4338	R	2.23E-06	6.81E-06	2.54E-06	6.40E-07	1.99E-05	3.22E-05
Indiana	Clay County	40200	021402	-87.107657	39.526555	6245	R	4.79E-07	5.17E-06	5.58E-06	8.26E-07	2.01E-05	3.21E-05
Indiana	Huntington Co	991700	0699917	-85.3827	40.877706	3914	U	1.45E-06	6.27E-06	3.45E-06	1.07E-06	1.99E-05	3.21E-05
Indiana	Scott County	966800	1439668	-85.807267	38.746349	4287	U	6.97E-08	5.82E-06	5.04E-06	9.79E-07	2.02E-05	3.21E-05
Indiana	Grant County	800	0538	-85.664271	40.520907	5534	U	3.90E-07	4.05E-06	6.20E-06	1.43E-06	2.00E-05	3.20E-05
Indiana	Howard Coun	10100	067101	-85.956769	40.480594	5936	U	8.76E-07	3.53E-06	6.29E-06	1.35E-06	2.00E-05	3.20E-05
Indiana	Lawrence Co	951100	0939511	-86.480689	38.854348	3958	R	1.96E-07	5.95E-06	4.67E-06	1.19E-06	2.00E-05	3.20E-05
Indiana	Dearborn Cou	80600	029806	-85.002949	39.032099	6508	U	1.14E-06	4.14E-06	5.26E-06	1.96E-06	1.94E-05	3.19E-05
Indiana	Whitley Coun	50300	183503	-85.620598	41.104155	4905	U	2.57E-06	4.72E-06	3.45E-06	1.22E-06	2.00E-05	3.19E-05
Indiana	Knox County	955500	0839555	-87.528156	38.668097	3765	U	1.45E-06	4.99E-06	3.85E-06	1.34E-06	2.02E-05	3.18E-05
Indiana	Lagrange Cou	970700	0879707	-85.237141	41.567258	2624	R	3.11E-06	2.78E-06	3.56E-06	2.24E-06	2.01E-05	3.18E-05
Indiana	Steuben Cou	971600	1519716	-84.994073	41.549174	3736	R	4.13E-06	3.05E-06	3.81E-06	1.02E-06	1.98E-05	3.18E-05
Indiana	Tippecanoe C	10900	157109	-86.762664	40.398628	5444	U	1.61E-06	2.94E-06	5.89E-06	1.44E-06	1.99E-05	3.18E-05
Indiana	Clark County	50801	019508.01	-85.891156	38.445548	3748	U	7.59E-07	3.44E-06	5.73E-06	1.76E-06	2.00E-05	3.17E-05
Indiana	Randolph Cou	951900	1359519	-85.152083	40.180014	4531	R	1.84E-07	7.27E-06	3.20E-06	9.51E-07	2.01E-05	3.17E-05
Indiana	Steuben Cou	971500	1519715	-85.129133	41.59965	3134	R	5.11E-06	2.36E-06	3.08E-06	1.12E-06	2.00E-05	3.17E-05
Indiana	Tippecanoe C	10600	157106	-86.986408	40.380817	4709	U	3.07E-06	2.50E-06	5.14E-06	1.37E-06	1.97E-05	3.17E-05
Indiana	Dearborn Cou	80700	029807	-85.035748	39.121733	5102	U	1.55E-06	3.49E-06	5.00E-06	1.95E-06	1.96E-05	3.16E-05
Indiana	Delaware Cou	2500	03525	-85.493167	40.279593	5537	U	1.49E-07	3.65E-06	5.69E-06	2.10E-06	2.00E-05	3.16E-05
Indiana	Harrison Cou	60200	061602	-86.124855	38.30265	6313	U	7.71E-07	4.53E-06	5.09E-06	1.36E-06	1.98E-05	3.16E-05
Indiana	Madison Cou	10400	095104	-85.813065	40.254571	3029	U	1.77E-07	3.57E-06	6.19E-06	1.66E-06	2.00E-05	3.16E-05
Indiana	Marshall Cou	20702	099207.02	-86.117438	41.309785	2965	R	2.92E-06	3.09E-06	4.08E-06	1.52E-06	2.00E-05	3.16E-05
Indiana	Lawrence Co	950800	0939508	-86.505363	38.849578	3434	R	1.31E-07	5.30E-06	4.80E-06	1.26E-06	2.00E-05	3.15E-05
Indiana	Marshall Cou	20701	099207.01	-86.270487	41.320337	2656	R	1.56E-06	4.04E-06	4.64E-06	1.34E-06	2.00E-05	3.15E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Starke County	954100	1499541	-86.709411	41.249857	3406	R	4.60E-06	3.43E-06	2.80E-06	7.64E-07	1.99E-05	3.15E-05
Indiana	Tippecanoe Co	10700	157107	-86.867149	40.332464	1352	U	8.58E-07	2.76E-06	5.81E-06	2.19E-06	1.98E-05	3.14E-05
Indiana	De Kalb Cour	20100	033201	-85.018847	41.491615	4109	U	3.07E-06	3.89E-06	3.32E-06	9.62E-07	2.00E-05	3.13E-05
Indiana	Delaware Cou	2602	03526.02	-85.365038	40.342247	3048	U	7.93E-08	4.08E-06	4.90E-06	2.14E-06	2.01E-05	3.13E-05
Indiana	Fountain Cou	957700	0459577	-87.246661	40.289661	2610	R	2.54E-07	5.54E-06	4.50E-06	9.35E-07	2.01E-05	3.13E-05
Indiana	Howard Cour	10500	067105	-86.243246	40.435746	4346	U	7.21E-07	1.83E-06	6.95E-06	1.73E-06	2.01E-05	3.13E-05
Indiana	Monroe Coun	1400	10514	-86.448208	39.21684	6635	U	7.62E-07	2.91E-06	5.69E-06	2.13E-06	1.98E-05	3.13E-05
Indiana	Starke County	953900	1499539	-86.626741	41.230694	2195	R	4.30E-06	3.24E-06	3.01E-06	7.86E-07	2.00E-05	3.13E-05
Indiana	Brown County	974900	0139749	-86.209035	39.155032	3986	R	1.55E-06	5.05E-06	3.25E-06	1.20E-06	2.02E-05	3.12E-05
Indiana	Jay County	963000	0759630	-84.972556	40.431768	2551	R	2.68E-07	6.73E-06	3.29E-06	8.20E-07	2.01E-05	3.12E-05
Indiana	Decatur Cour	969400	0319694	-85.43814	39.302251	5234	R	2.09E-06	5.36E-06	2.99E-06	7.48E-07	1.99E-05	3.11E-05
Indiana	Fulton County	953100	0499531	-86.213791	41.062563	5589	R	9.58E-07	4.62E-06	4.33E-06	9.86E-07	2.02E-05	3.11E-05
Indiana	Posey County	40400	129404	-87.734868	37.959524	4856	U	5.81E-07	3.79E-06	5.35E-06	1.49E-06	1.99E-05	3.11E-05
Indiana	Wayne Count	10800	177108	-84.99313	39.815886	3033	U	6.27E-07	5.48E-06	3.86E-06	8.69E-07	2.01E-05	3.10E-05
Indiana	De Kalb Cour	20300	033203	-84.879689	41.420717	4016	U	2.33E-06	4.46E-06	3.11E-06	8.97E-07	2.00E-05	3.08E-05
Indiana	Grant County	500	0535	-85.679067	40.583676	4831	U	5.55E-07	3.51E-06	5.38E-06	1.37E-06	2.00E-05	3.08E-05
Indiana	Jay County	963100	0759631	-84.987055	40.432284	4196	R	2.93E-07	6.58E-06	3.23E-06	7.98E-07	1.99E-05	3.08E-05
Indiana	Putnam Cour	956300	1339563	-86.848683	39.642003	6119	R	3.77E-07	5.11E-06	4.38E-06	9.31E-07	1.98E-05	3.06E-05
Indiana	Knox County	955700	0839557	-87.493966	38.684144	4599	U	1.28E-06	3.55E-06	4.14E-06	1.49E-06	2.00E-05	3.05E-05
Indiana	Decatur Cour	969500	0319695	-85.57908	39.182264	3701	R	2.20E-06	4.83E-06	2.66E-06	7.01E-07	2.00E-05	3.04E-05
Indiana	Knox County	955600	0839556	-87.514174	38.671976	3149	U	1.39E-06	3.54E-06	3.93E-06	1.46E-06	2.01E-05	3.04E-05
Indiana	Putnam Cour	956200	1339562	-86.866865	39.645552	4956	R	2.46E-07	5.16E-06	4.24E-06	8.59E-07	1.99E-05	3.04E-05
Indiana	Tipton County	20400	159204	-86.040055	40.28606	6656	R	6.09E-07	4.49E-06	4.17E-06	1.07E-06	2.00E-05	3.04E-05
Indiana	Franklin Cour	960100	0479601	-85.229423	39.342707	3779	R	2.53E-06	4.23E-06	2.80E-06	6.49E-07	2.01E-05	3.03E-05
Indiana	Ohio County	965800	1159658	-84.945241	38.957813	2777	U	1.01E-06	3.52E-06	4.77E-06	1.59E-06	1.94E-05	3.03E-05
Indiana	Sullivan Cour	50300	153503	-87.407353	39.098548	5918	R	5.91E-07	5.01E-06	3.94E-06	7.30E-07	2.00E-05	3.03E-05
Indiana	Vermillion Co	20300	165203	-87.456522	39.688853	3233	R	3.33E-07	5.82E-06	3.54E-06	6.61E-07	1.99E-05	3.03E-05
Indiana	Boone County	810100	0118101	-86.403095	40.131523	3072	U	1.75E-06	1.87E-06	4.88E-06	1.78E-06	1.99E-05	3.02E-05
Indiana	Huntington Co	992000	0699920	-85.567031	40.83222	3827	U	2.41E-06	3.88E-06	2.97E-06	9.53E-07	2.00E-05	3.02E-05
Indiana	Daviess Cour	954900	0279549	-87.157017	38.65725	3931	R	4.11E-07	3.98E-06	4.61E-06	9.68E-07	2.01E-05	3.01E-05
Indiana	Howard Cour	10300	067103	-86.180864	40.509643	3094	U	7.04E-07	1.82E-06	6.10E-06	1.49E-06	2.00E-05	3.01E-05
Indiana	Jefferson Cou	966000	0779660	-85.307507	38.809006	3512	U	2.33E-07	7.05E-06	2.13E-06	5.44E-07	2.02E-05	3.01E-05
Indiana	Grant County	10600	053106	-85.599835	40.522973	3117	U	4.92E-07	3.23E-06	4.79E-06	1.34E-06	2.01E-05	3.00E-05
Indiana	Harrison Cou	60100	061601	-86.132708	38.376345	5118	U	4.91E-07	3.82E-06	4.87E-06	1.22E-06	1.96E-05	3.00E-05
Indiana	Jasper Count	991000	0739910	-87.194862	41.125828	4839	R	4.54E-06	1.97E-06	2.82E-06	1.12E-06	1.95E-05	3.00E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Vanderburgh	10498	163104.98	-87.694475	37.940544	14	U	3.78E-07	4.76E-06	7.28E-06	2.87E-06	1.47E-05	3.00E-05
Indiana	Jefferson Cou	966300	0779663	-85.472726	38.714366	3954	U	1.56E-07	4.87E-06	3.83E-06	9.51E-07	2.01E-05	2.99E-05
Indiana	Ripley County	968400	1379684	-85.13654	39.237327	5444	R	1.43E-06	4.35E-06	3.34E-06	1.13E-06	1.95E-05	2.98E-05
Indiana	Starke County	953700	1499537	-86.572678	41.346989	3602	R	6.95E-07	4.92E-06	3.45E-06	9.29E-07	1.98E-05	2.98E-05
Indiana	Grant County	10400	053104	-85.63697	40.477268	3750	U	5.16E-07	2.92E-06	4.76E-06	1.35E-06	2.01E-05	2.97E-05
Indiana	Posey County	40300	129403	-87.761109	38.056801	2380	U	5.90E-07	2.89E-06	4.80E-06	1.45E-06	1.99E-05	2.97E-05
Indiana	Spencer Cou	953100	1479531	-87.057152	37.88568	3068	R	9.21E-07	4.09E-06	3.77E-06	8.54E-07	2.00E-05	2.97E-05
Indiana	Warrick Coun	30200	173302	-87.377678	38.17984	3196	U	3.79E-07	3.41E-06	4.77E-06	1.18E-06	2.00E-05	2.97E-05
Indiana	Jay County	963300	0759633	-85.209011	40.373635	2917	R	1.39E-07	5.35E-06	3.24E-06	9.58E-07	1.99E-05	2.96E-05
Indiana	Tippecanoe Co	10100	157101	-86.80693	40.509037	5130	U	7.52E-07	2.48E-06	5.30E-06	1.32E-06	1.97E-05	2.96E-05
Indiana	Warrick Coun	30500	173305	-87.274206	38.004885	3783	U	5.69E-07	2.83E-06	5.08E-06	1.16E-06	1.99E-05	2.96E-05
Indiana	Daviess Cour	954700	0279547	-87.187822	38.661606	3741	R	4.20E-07	3.70E-06	4.45E-06	9.05E-07	2.00E-05	2.95E-05
Indiana	Greene Coun	955400	0559554	-86.937229	39.029426	3483	R	2.09E-07	4.40E-06	3.88E-06	1.06E-06	2.00E-05	2.95E-05
Indiana	Jackson Cour	968100	0719681	-86.0384	38.879877	3745	R	1.42E-07	4.69E-06	3.38E-06	9.50E-07	2.03E-05	2.95E-05
Indiana	Monroe Coun	1200	10512	-86.627109	39.098085	5390	U	2.87E-08	2.39E-06	5.15E-06	1.96E-06	2.00E-05	2.95E-05
Indiana	Ripley County	968800	1379688	-85.242973	39.079718	2916	R	1.60E-06	4.03E-06	3.36E-06	8.91E-07	1.97E-05	2.95E-05
Indiana	Carroll Count	959600	0159596	-86.673113	40.585193	3063	R	3.62E-07	3.52E-06	4.53E-06	9.95E-07	2.00E-05	2.94E-05
Indiana	Franklin Cour	969900	0479699	-85.193457	39.482948	3522	R	3.42E-06	2.93E-06	2.45E-06	6.48E-07	2.00E-05	2.94E-05
Indiana	Henry County	975600	0659756	-85.317251	40.024617	4272	R	8.04E-07	2.98E-06	4.42E-06	1.22E-06	2.00E-05	2.94E-05
Indiana	White County	958600	1819586	-86.763219	40.74751	5018	R	1.57E-07	3.54E-06	4.45E-06	9.67E-07	2.03E-05	2.94E-05
Indiana	Grant County	10700	053107	-85.495681	40.448159	5094	U	1.11E-06	2.80E-06	4.03E-06	1.14E-06	2.02E-05	2.93E-05
Indiana	Parke County	30300	121303	-87.233915	39.766381	4006	R	3.53E-07	4.75E-06	3.42E-06	6.52E-07	2.01E-05	2.93E-05
Indiana	Vermillion Co	20200	165202	-87.445404	39.829172	2899	R	8.26E-07	5.34E-06	2.68E-06	5.35E-07	1.99E-05	2.93E-05
Indiana	Wabash Cour	992400	1699924	-85.885433	40.8628	3362	U	3.71E-06	1.79E-06	2.73E-06	8.89E-07	2.02E-05	2.93E-05
Indiana	Howard Cour	10400	067104	-86.289447	40.490482	3682	U	7.52E-07	1.61E-06	5.33E-06	1.32E-06	2.01E-05	2.91E-05
Indiana	Putnam Cour	956400	1339564	-86.754431	39.701864	4722	R	2.78E-06	2.04E-06	3.68E-06	1.08E-06	1.95E-05	2.91E-05
Indiana	Madison Cou	10100	095101	-85.691083	40.338417	3141	U	1.17E-07	2.48E-06	5.12E-06	1.47E-06	1.98E-05	2.90E-05
Indiana	Randolph Cou	951700	1359517	-84.972154	40.170906	3550	R	1.94E-07	4.13E-06	3.70E-06	9.07E-07	2.01E-05	2.90E-05
Indiana	Grant County	10200	053102	-85.776839	40.479877	4720	U	7.46E-07	2.22E-06	4.73E-06	1.28E-06	2.00E-05	2.89E-05
Indiana	Henry County	975500	0659755	-85.318619	39.942608	3634	R	8.90E-07	3.09E-06	4.08E-06	1.03E-06	1.98E-05	2.89E-05
Indiana	Henry County	976800	0659768	-85.372374	39.829324	4497	R	2.05E-06	2.65E-06	3.66E-06	9.10E-07	1.96E-05	2.89E-05
Indiana	Huntington Co	992100	0699921	-85.46467	40.692055	3752	U	1.35E-06	3.94E-06	2.86E-06	8.63E-07	1.99E-05	2.89E-05
Indiana	Orange Coun	951500	1179515	-86.620288	38.550981	3454	R	5.60E-07	4.66E-06	3.04E-06	5.07E-07	2.00E-05	2.88E-05
Indiana	Scott County	967100	1439671	-85.692317	38.656827	4678	U	3.42E-07	3.54E-06	4.25E-06	1.06E-06	1.96E-05	2.88E-05
Indiana	Randolph Cou	951800	1359518	-84.987346	40.170012	2480	R	2.05E-07	4.24E-06	3.33E-06	8.26E-07	2.01E-05	2.87E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
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Indiana	Crawford Cou	952100	0259521	-86.400569	38.220492	2465	R	1.11E-06	4.57E-06	2.47E-06	6.47E-07	1.99E-05	2.86E-05
Indiana	Dubois Count	953600	0379536	-86.753877	38.376337	4683	R	1.50E-06	4.21E-06	2.17E-06	5.47E-07	2.01E-05	2.85E-05
Indiana	Marshall Cou	20800	099208	-86.21579	41.227321	4818	R	1.69E-06	2.21E-06	3.52E-06	1.10E-06	1.99E-05	2.85E-05
Indiana	Switzerland C	965700	1559657	-84.913554	38.846711	2943	R	8.72E-07	3.44E-06	3.80E-06	1.19E-06	1.92E-05	2.85E-05
Indiana	Wabash Cour	992300	1699923	-85.798542	40.992239	5201	U	2.18E-06	2.23E-06	2.86E-06	1.00E-06	2.02E-05	2.85E-05
Indiana	Dubois Count	953700	0379537	-86.920358	38.244427	6944	R	1.13E-06	3.60E-06	2.80E-06	6.64E-07	2.02E-05	2.84E-05
Indiana	Franklin Cour	969800	0479698	-85.067307	39.408513	4478	R	2.08E-06	2.58E-06	3.01E-06	8.59E-07	1.99E-05	2.84E-05
Indiana	Martin County	950200	1019502	-86.912839	38.675962	3834	R	3.45E-07	4.17E-06	2.97E-06	7.11E-07	2.02E-05	2.84E-05
Indiana	Pike County	954000	1259540	-87.279255	38.493723	3253	R	5.56E-07	3.93E-06	3.25E-06	7.21E-07	2.00E-05	2.84E-05
Indiana	Ripley County	968900	1379689	-85.152912	39.064575	4085	R	9.06E-07	3.71E-06	3.07E-06	1.02E-06	1.97E-05	2.84E-05
Indiana	Spencer Cou	953000	1479530	-87.169157	37.894807	3969	R	8.01E-07	2.81E-06	3.94E-06	9.39E-07	1.99E-05	2.84E-05
Indiana	Sullivan Cour	50100	153501	-87.363175	39.204033	5934	R	5.07E-07	4.26E-06	3.18E-06	5.89E-07	1.98E-05	2.84E-05
Indiana	Tipton County	20300	159203	-86.130149	40.267938	2935	R	6.30E-07	2.69E-06	4.11E-06	1.14E-06	1.98E-05	2.84E-05
Indiana	Carroll Count	959800	0159598	-86.522319	40.542689	2893	R	2.72E-06	1.61E-06	3.19E-06	7.43E-07	2.00E-05	2.83E-05
Indiana	Cass County	951700	0179517	-86.242521	40.746387	2481	R	8.88E-07	3.19E-06	3.42E-06	8.45E-07	1.99E-05	2.83E-05
Indiana	Grant County	10300	053103	-85.635485	40.415373	4487	U	3.54E-07	2.39E-06	4.40E-06	1.19E-06	1.99E-05	2.83E-05
Indiana	Jennings Cou	960400	0799604	-85.678707	38.996228	5331	R	1.24E-07	3.86E-06	3.56E-06	6.51E-07	2.01E-05	2.83E-05
Indiana	Jackson Cour	968000	0719680	-86.107975	38.969318	5159	R	1.08E-07	4.82E-06	2.65E-06	6.91E-07	1.99E-05	2.82E-05
Indiana	Tippecanoe C	10201	157102.01	-86.960106	40.501571	4051	U	5.97E-07	2.08E-06	4.56E-06	1.28E-06	1.97E-05	2.82E-05
Indiana	Crawford Cou	952000	0259520	-86.522922	38.334415	3839	R	1.04E-06	4.70E-06	2.09E-06	4.81E-07	1.98E-05	2.81E-05
Indiana	Scott County	966900	1439669	-85.81499	38.666557	3349	U	2.52E-07	3.37E-06	3.62E-06	8.93E-07	1.99E-05	2.81E-05
Indiana	Wayne Count	10400	177104	-85.158695	39.913732	3327	U	3.09E-07	3.94E-06	2.91E-06	7.34E-07	2.02E-05	2.81E-05
Indiana	Fayette Coun	954600	0419546	-85.202455	39.586544	3408	U	2.50E-06	2.32E-06	2.52E-06	6.27E-07	2.01E-05	2.80E-05
Indiana	Owen County	955800	1199558	-86.755557	39.293426	4363	R	1.90E-07	3.55E-06	3.58E-06	8.91E-07	1.98E-05	2.80E-05
Indiana	Parke County	30200	121302	-87.356101	39.72604	3257	R	9.07E-07	3.75E-06	2.80E-06	5.22E-07	2.00E-05	2.80E-05
Indiana	Wayne Count	10600	177106	-85.173039	39.808488	4951	U	4.30E-07	3.93E-06	3.01E-06	6.25E-07	2.00E-05	2.80E-05
Indiana	Clinton Count	950300	0239503	-86.630446	40.378988	4218	R	9.41E-07	1.93E-06	4.12E-06	1.10E-06	1.98E-05	2.79E-05
Indiana	Miami County	952900	1039529	-86.147377	40.663299	4279	R	7.98E-07	3.55E-06	4.06E-06	7.85E-07	1.87E-05	2.79E-05
Indiana	Warrick Count	30100	173301	-87.142607	38.125566	3407	U	4.53E-07	2.60E-06	3.86E-06	8.90E-07	2.01E-05	2.79E-05
Indiana	Wayne Count	10700	177107	-84.97232	39.769617	3819	U	5.44E-07	3.69E-06	2.93E-06	7.43E-07	2.00E-05	2.79E-05
Indiana	Clay County	40400	021404	-87.180575	39.512335	3661	R	5.63E-07	2.86E-06	3.86E-06	6.74E-07	1.98E-05	2.78E-05
Indiana	Crawford Cou	951900	0259519	-86.327393	38.355941	3610	R	5.41E-07	4.03E-06	3.09E-06	7.63E-07	1.94E-05	2.78E-05
Indiana	Wayne Count	10500	177105	-85.067562	39.844622	2217	U	6.39E-07	3.47E-06	2.81E-06	8.02E-07	2.01E-05	2.78E-05
Indiana	Cass County	951000	0179510	-86.405811	40.811792	2120	R	5.92E-07	2.74E-06	3.53E-06	8.70E-07	2.00E-05	2.77E-05
Indiana	Miami County	952800	1039528	-86.12087	40.719786	2564	R	9.20E-07	3.07E-06	3.00E-06	6.89E-07	2.00E-05	2.77E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Lawrence Co	950500	0939505	-86.474429	38.924083	4738	R	1.30E-07	2.76E-06	3.75E-06	1.11E-06	1.99E-05	2.76E-05
Indiana	Perry County	952200	1239522	-86.62976	38.145583	4124	R	1.47E-06	3.44E-06	2.05E-06	4.39E-07	2.02E-05	2.76E-05
Indiana	Starke Count	953800	1499538	-86.543576	41.252626	2679	R	4.77E-07	3.45E-06	2.89E-06	7.95E-07	1.99E-05	2.76E-05
Indiana	Switzerland C	965900	1559659	-85.089989	38.74693	2510	R	2.57E-07	4.81E-06	2.04E-06	5.15E-07	2.00E-05	2.76E-05
Indiana	Washington C	967700	1759677	-86.053265	38.483916	5103	R	3.24E-07	3.09E-06	3.76E-06	9.53E-07	1.95E-05	2.76E-05
Indiana	Wayne Count	10300	177103	-85.056933	39.949324	3377	U	3.61E-07	3.63E-06	2.78E-06	7.83E-07	2.01E-05	2.76E-05
Indiana	Jasper Count	990800	0739908	-87.019572	41.145537	3971	R	2.95E-06	1.58E-06	2.30E-06	7.82E-07	1.99E-05	2.75E-05
Indiana	Posey County	40100	129401	-87.762503	38.14165	5836	U	3.80E-07	2.32E-06	4.07E-06	1.12E-06	1.96E-05	2.75E-05
Indiana	Rush County	974100	1399741	-85.371321	39.629047	3608	R	2.85E-06	1.99E-06	2.29E-06	5.18E-07	1.98E-05	2.75E-05
Indiana	Spencer Cou	952700	1479527	-86.918171	38.149324	6410	R	8.29E-07	3.12E-06	2.84E-06	5.81E-07	2.02E-05	2.75E-05
Indiana	Spencer Cou	952900	1479529	-87.084637	38.01718	2876	R	5.58E-07	2.52E-06	3.65E-06	8.52E-07	1.99E-05	2.75E-05
Indiana	Tippecanoe C	11000	157110	-86.832587	40.262316	3325	U	5.62E-07	1.89E-06	4.05E-06	1.18E-06	1.99E-05	2.75E-05
Indiana	Clinton Count	950100	0239501	-86.329928	40.270143	3391	R	7.14E-07	1.98E-06	3.79E-06	1.06E-06	1.98E-05	2.74E-05
Indiana	Knox County	955000	0839550	-87.308408	38.774122	3522	U	6.52E-07	2.21E-06	3.23E-06	1.16E-06	2.01E-05	2.74E-05
Indiana	Miami County	952600	1039526	-85.934333	40.624444	3699	R	9.17E-07	2.50E-06	3.13E-06	7.84E-07	2.00E-05	2.74E-05
Indiana	Randolph Co	951500	1359515	-85.095897	40.263654	3142	R	1.72E-07	3.98E-06	2.52E-06	7.84E-07	2.00E-05	2.74E-05
Indiana	Fayette Coun	954000	0419540	-85.091273	39.611308	3644	U	2.05E-06	2.43E-06	2.49E-06	6.17E-07	1.98E-05	2.73E-05
Indiana	Grant County	10100	053101	-85.731025	40.598276	5239	U	4.60E-07	2.05E-06	3.84E-06	1.04E-06	1.99E-05	2.73E-05
Indiana	Switzerland C	965800	1559658	-85.104064	38.839452	2285	R	3.46E-07	4.31E-06	2.05E-06	4.88E-07	2.01E-05	2.73E-05
Indiana	Tipton County	20200	159202	-86.108641	40.373232	3536	R	6.67E-07	1.74E-06	4.09E-06	9.84E-07	1.98E-05	2.73E-05
Indiana	Union County	960800	1619608	-84.891261	39.576703	2805	R	6.41E-07	2.47E-06	3.35E-06	1.16E-06	1.97E-05	2.73E-05
Indiana	Cass County	950900	0179509	-86.300772	40.809556	4924	R	6.83E-07	2.45E-06	3.25E-06	8.47E-07	2.00E-05	2.72E-05
Indiana	Clinton Count	950400	0239504	-86.583936	40.236593	4030	R	1.28E-06	1.66E-06	3.37E-06	8.94E-07	2.00E-05	2.72E-05
Indiana	Fayette Coun	954200	0419542	-85.201658	39.681021	3459	U	1.25E-06	2.86E-06	2.45E-06	6.19E-07	2.01E-05	2.72E-05
Indiana	Grant County	10800	053108	-85.526531	40.578523	4470	U	6.96E-07	1.78E-06	3.64E-06	1.10E-06	2.00E-05	2.72E-05
Indiana	Marshall Cou	20302	099203.02	-86.412888	41.22307	3288	R	9.82E-07	2.20E-06	3.13E-06	8.86E-07	2.00E-05	2.72E-05
Indiana	Posey County	40200	129402	-87.915739	38.08798	2624	U	7.80E-07	2.30E-06	3.04E-06	1.20E-06	1.98E-05	2.72E-05
Indiana	Blackford Cou	975400	0099754	-85.33884	40.425774	3649	U	3.22E-07	2.74E-06	3.08E-06	9.65E-07	1.99E-05	2.71E-05
Indiana	Gibson Count	50200	051502	-87.569827	38.224921	7187	R	5.21E-07	2.03E-06	3.76E-06	1.02E-06	1.98E-05	2.71E-05
Indiana	Owen County	955600	1199556	-86.850547	39.42256	2666	R	3.41E-07	2.89E-06	3.77E-06	9.66E-07	1.91E-05	2.71E-05
Indiana	Perry County	952300	1239523	-86.690921	37.992275	3382	R	1.35E-06	3.21E-06	2.12E-06	4.62E-07	2.00E-05	2.71E-05
Indiana	Scott County	966700	1439667	-85.736769	38.752341	3933	U	7.86E-08	2.81E-06	3.35E-06	7.60E-07	2.00E-05	2.71E-05
Indiana	Spencer Cou	952800	1479528	-86.927519	37.999555	3167	R	7.31E-07	2.69E-06	2.98E-06	6.71E-07	2.00E-05	2.71E-05
Indiana	Wabash Cou	992900	1699929	-85.790023	40.69556	3698	U	1.81E-06	1.74E-06	2.84E-06	8.13E-07	1.99E-05	2.71E-05
Indiana	Boone Count	810200	0118102	-86.616647	40.107668	3251	U	6.76E-07	1.53E-06	3.68E-06	1.24E-06	1.99E-05	2.70E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Clay County	40500	021405	-87.08623	39.398817	3303	R	3.95E-07	2.90E-06	3.08E-06	6.36E-07	2.00E-05	2.70E-05
Indiana	Greene Coun	955000	0559550	-87.199162	39.158056	3123	R	6.47E-07	3.01E-06	2.88E-06	5.28E-07	1.99E-05	2.70E-05
Indiana	Lawrence Co	950600	0939506	-86.564896	38.92677	6104	R	1.55E-07	2.54E-06	3.25E-06	9.56E-07	2.01E-05	2.70E-05
Indiana	Miami County	952700	1039527	-86.091473	40.634032	4730	R	5.75E-07	2.14E-06	3.56E-06	7.80E-07	2.00E-05	2.70E-05
Indiana	Putnam Coun	956600	1339566	-86.916805	39.556541	4647	R	4.95E-07	2.49E-06	3.73E-06	8.59E-07	1.94E-05	2.70E-05
Indiana	Washington C	967600	1759676	-86.072466	38.602614	3219	R	5.40E-07	3.11E-06	3.01E-06	7.21E-07	1.96E-05	2.70E-05
Indiana	Wells County	40700	179407	-85.265663	40.635351	3922	U	3.68E-07	3.45E-06	2.43E-06	7.56E-07	2.00E-05	2.70E-05
Indiana	Clay County	40600	021406	-87.145249	39.247409	3612	R	7.58E-07	2.87E-06	2.73E-06	6.18E-07	2.00E-05	2.69E-05
Indiana	Randolph Co	951600	1359516	-84.815517	40.20225	3920	R	1.79E-07	2.96E-06	3.03E-06	7.34E-07	2.00E-05	2.69E-05
Indiana	Randolph Co	952100	1359521	-85.098348	40.056622	3118	R	2.40E-07	3.57E-06	2.54E-06	7.43E-07	1.98E-05	2.69E-05
Indiana	Tipton County	20100	159201	-85.926699	40.324018	2992	R	3.15E-07	2.00E-06	3.77E-06	1.02E-06	1.98E-05	2.69E-05
Indiana	Cass County	951800	0179518	-86.325341	40.701439	4428	R	6.94E-07	2.15E-06	3.19E-06	7.54E-07	2.00E-05	2.68E-05
Indiana	Clinton Count	950200	0239502	-86.459122	40.335185	4958	R	8.71E-07	1.60E-06	3.59E-06	9.17E-07	1.98E-05	2.68E-05
Indiana	Jay County	962800	0759628	-84.929448	40.51335	3036	R	3.04E-07	4.18E-06	1.71E-06	4.99E-07	2.01E-05	2.68E-05
Indiana	Jennings Cou	960300	0799603	-85.698081	39.068323	5979	R	2.09E-07	3.13E-06	2.95E-06	6.11E-07	1.99E-05	2.68E-05
Indiana	Ripley County	968600	1379686	-85.296217	39.157902	4593	R	1.12E-06	2.63E-06	2.52E-06	6.26E-07	1.99E-05	2.68E-05
Indiana	Blackford Cou	975100	0099751	-85.305645	40.539887	3759	U	2.98E-07	2.54E-06	3.13E-06	8.67E-07	1.98E-05	2.67E-05
Indiana	Cass County	951900	0179519	-86.226847	40.589253	4010	R	7.06E-07	1.79E-06	3.45E-06	8.96E-07	1.98E-05	2.67E-05
Indiana	Gibson Count	50300	051503	-87.364264	38.312652	5866	R	4.37E-07	2.42E-06	3.27E-06	8.09E-07	1.97E-05	2.67E-05
Indiana	Jackson Cou	968300	0719683	-85.838992	38.807689	3574	R	1.19E-07	3.28E-06	2.61E-06	6.90E-07	2.00E-05	2.67E-05
Indiana	Orange Coun	951600	1179516	-86.556291	38.502974	2490	R	5.15E-07	3.37E-06	2.24E-06	4.63E-07	2.00E-05	2.66E-05
Indiana	Carroll Count	959500	0159595	-86.752432	40.664974	2240	R	2.21E-07	1.76E-06	3.73E-06	8.09E-07	2.00E-05	2.65E-05
Indiana	Orange Coun	951800	1179518	-86.378385	38.503331	3184	R	3.13E-07	3.27E-06	2.61E-06	6.91E-07	1.96E-05	2.65E-05
Indiana	Carroll Count	959700	0159597	-86.629101	40.522742	2906	R	8.59E-07	1.35E-06	3.48E-06	8.12E-07	1.99E-05	2.64E-05
Indiana	Carroll Count	959900	0159599	-86.429833	40.488498	2653	R	1.03E-06	1.41E-06	3.52E-06	8.59E-07	1.96E-05	2.64E-05
Indiana	Gibson Count	50400	051504	-87.538587	38.378773	6777	R	1.17E-06	1.75E-06	2.89E-06	6.94E-07	1.99E-05	2.64E-05
Indiana	Jasper Count	991100	0739911	-87.173316	40.940013	3143	R	2.08E-06	1.38E-06	2.30E-06	6.47E-07	2.00E-05	2.64E-05
Indiana	Jefferson Cou	966200	0779662	-85.553714	38.707647	4292	U	1.86E-07	2.44E-06	3.11E-06	7.83E-07	1.99E-05	2.64E-05
Indiana	Owen County	955900	1199559	-86.76938	39.219897	3627	R	2.33E-07	2.38E-06	3.37E-06	9.13E-07	1.95E-05	2.64E-05
Indiana	Pulaski Count	959000	1319590	-86.599886	41.05138	3472	R	6.87E-07	2.75E-06	2.50E-06	5.51E-07	1.99E-05	2.64E-05
Indiana	Clay County	40300	021403	-87.079746	39.537006	3165	R	3.68E-07	2.34E-06	2.99E-06	6.23E-07	2.00E-05	2.63E-05
Indiana	Jay County	963200	0759632	-85.136923	40.348861	2704	R	1.20E-07	3.00E-06	2.48E-06	8.01E-07	1.99E-05	2.63E-05
Indiana	Jefferson Cou	966100	0779661	-85.497658	38.812148	4368	U	2.05E-07	3.05E-06	2.34E-06	5.73E-07	2.01E-05	2.63E-05
Indiana	Jennings Cou	960200	0799602	-85.545864	39.024404	5498	R	3.68E-07	3.04E-06	2.42E-06	5.23E-07	2.00E-05	2.63E-05
Indiana	Greene Coun	954700	0559547	-86.746481	39.038694	6015	R	4.30E-08	2.31E-06	2.98E-06	9.39E-07	1.99E-05	2.62E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
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Indiana	Owen County	955500	1199555	-86.696316	39.387327	2988	R	5.19E-07	1.97E-06	3.49E-06	9.56E-07	1.93E-05	2.62E-05
Indiana	Owen County	955700	1199557	-86.918826	39.289221	3637	R	3.21E-07	2.45E-06	3.10E-06	7.85E-07	1.96E-05	2.62E-05
Indiana	Pulaski Count	959100	1319591	-86.798554	41.104833	3468	R	2.43E-06	1.41E-06	1.76E-06	4.48E-07	2.02E-05	2.62E-05
Indiana	Ripley County	968700	1379687	-85.336701	39.037033	3260	R	6.90E-07	2.92E-06	2.37E-06	5.69E-07	1.97E-05	2.62E-05
Indiana	Jasper Count	991200	0739912	-87.128663	40.941793	3547	R	1.90E-06	1.39E-06	2.29E-06	6.28E-07	1.99E-05	2.61E-05
Indiana	Lawrence Co	951200	0939512	-86.438642	38.771231	5337	R	4.32E-08	2.34E-06	2.92E-06	8.93E-07	1.99E-05	2.61E-05
Indiana	Pike County	953900	1259539	-87.127035	38.395487	2863	R	7.72E-07	2.81E-06	2.01E-06	4.85E-07	2.01E-05	2.61E-05
Indiana	Greene Coun	954900	0559549	-87.145032	39.065823	4542	R	3.38E-07	2.25E-06	2.68E-06	5.54E-07	2.02E-05	2.60E-05
Indiana	Jay County	962700	0759627	-85.114812	40.474064	3198	R	4.69E-07	2.86E-06	2.04E-06	5.57E-07	2.00E-05	2.60E-05
Indiana	Miami County	952000	1039520	-86.07013	40.899945	4539	R	9.11E-07	1.96E-06	2.41E-06	7.16E-07	2.00E-05	2.60E-05
Indiana	Montgomery C	956900	1079569	-86.973457	40.058536	4595	R	4.26E-07	2.10E-06	2.67E-06	6.47E-07	2.01E-05	2.60E-05
Indiana	Newton Count	990500	1119905	-87.390775	41.00478	3239	R	2.48E-06	1.13E-06	1.85E-06	6.34E-07	1.99E-05	2.60E-05
Indiana	Orange Count	951300	1179513	-86.441056	38.66029	3297	R	1.64E-07	2.51E-06	2.53E-06	6.47E-07	2.01E-05	2.60E-05
Indiana	Putnam Cour	956500	1339565	-86.782767	39.536964	4807	R	2.18E-07	1.93E-06	3.06E-06	7.62E-07	2.00E-05	2.60E-05
Indiana	Sullivan Cour	50200	153502	-87.517047	39.110452	2802	R	7.49E-07	2.84E-06	2.02E-06	4.42E-07	2.00E-05	2.60E-05
Indiana	Washington C	967200	1759672	-85.940615	38.619278	3276	R	2.59E-07	2.57E-06	2.86E-06	6.40E-07	1.97E-05	2.60E-05
Indiana	Jackson Cour	968200	0719682	-86.09985	38.826295	4375	R	2.15E-07	2.76E-06	2.33E-06	6.13E-07	2.00E-05	2.59E-05
Indiana	Montgomery C	957400	1079574	-86.882172	39.993676	3606	R	4.50E-07	1.86E-06	2.86E-06	6.88E-07	2.00E-05	2.59E-05
Indiana	Pike County	954200	1259542	-87.23768	38.35602	3220	R	4.97E-07	2.50E-06	2.47E-06	5.36E-07	1.99E-05	2.59E-05
Indiana	Sullivan Cour	50400	153504	-87.27779	39.073062	2183	R	6.94E-07	2.49E-06	2.27E-06	4.67E-07	2.00E-05	2.59E-05
Indiana	Gibson Count	50100	051501	-87.709415	38.275527	3188	R	7.49E-07	1.71E-06	2.82E-06	7.36E-07	1.98E-05	2.58E-05
Indiana	Knox County	955900	0839559	-87.528973	38.619782	5770	U	1.56E-06	1.70E-06	1.91E-06	6.19E-07	2.01E-05	2.58E-05
Indiana	Orange Count	951400	1179514	-86.534175	38.602516	2768	R	3.83E-07	2.85E-06	2.17E-06	4.33E-07	2.00E-05	2.58E-05
Indiana	Parke County	30400	121304	-87.164288	39.680081	4729	R	4.71E-07	2.45E-06	2.72E-06	4.99E-07	1.96E-05	2.58E-05
Indiana	Vermillion Co	20100	165201	-87.46879	40.010103	3627	R	2.14E-07	3.01E-06	1.98E-06	4.90E-07	2.01E-05	2.58E-05
Indiana	Jay County	962900	0759629	-84.919677	40.382385	2910	R	1.51E-07	3.10E-06	1.80E-06	4.76E-07	2.02E-05	2.57E-05
Indiana	Putnam Cour	956000	1339560	-86.832721	39.834818	3009	R	3.18E-07	1.43E-06	3.10E-06	1.04E-06	1.98E-05	2.57E-05
Indiana	Jennings Cou	960600	0799606	-85.656481	38.90131	4086	R	1.22E-07	2.69E-06	2.52E-06	5.50E-07	1.96E-05	2.55E-05
Indiana	Putnam Cour	956100	1339561	-86.930897	39.707987	2057	R	3.63E-07	1.86E-06	2.89E-06	6.58E-07	1.97E-05	2.55E-05
Indiana	Knox County	955200	0839552	-87.454362	38.760313	5331	U	1.04E-06	1.46E-06	1.99E-06	6.68E-07	2.03E-05	2.54E-05
Indiana	Lawrence Co	950700	0939507	-86.57566	38.792258	6047	R	6.85E-08	1.82E-06	2.75E-06	8.27E-07	1.99E-05	2.54E-05
Indiana	Montgomery C	957500	1079575	-86.776258	39.945455	3467	R	4.59E-07	1.31E-06	3.12E-06	9.47E-07	1.96E-05	2.54E-05
Indiana	Washington C	967400	1759674	-86.205094	38.540385	4267	R	2.71E-07	2.41E-06	2.47E-06	5.12E-07	1.97E-05	2.54E-05
Indiana	Fulton County	953000	0499530	-86.164103	41.100206	2944	R	1.11E-06	1.49E-06	2.11E-06	7.41E-07	1.98E-05	2.53E-05
Indiana	Fulton County	953500	0499535	-86.040128	41.037575	2592	R	1.29E-06	1.26E-06	2.04E-06	7.94E-07	1.99E-05	2.53E-05

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Lawrence Co	950400	0939504	-86.364665	38.868001	2880	R	1.56E-07	1.95E-06	2.62E-06	8.13E-07	1.98E-05	2.53E-05
Indiana	Union County	960700	1619607	-84.937009	39.651527	4171	R	3.85E-07	2.07E-06	2.32E-06	6.10E-07	1.99E-05	2.53E-05
Indiana	Carroll Count	959300	0159593	-86.498537	40.625823	2981	R	4.01E-07	1.21E-06	2.86E-06	6.82E-07	2.00E-05	2.52E-05
Indiana	Fulton County	953200	0499532	-86.33135	41.11542	2944	R	7.76E-07	1.49E-06	2.10E-06	6.40E-07	2.01E-05	2.51E-05
Indiana	Pike County	954100	1259541	-87.304021	38.461945	3173	R	6.02E-07	1.85E-06	2.30E-06	5.24E-07	1.98E-05	2.51E-05
Indiana	Fountain Cou	957900	0459579	-87.223137	40.117203	4538	R	2.39E-07	2.28E-06	2.03E-06	5.19E-07	1.99E-05	2.50E-05
Indiana	Greene Coun	954800	0559548	-86.94395	39.102368	3505	R	2.36E-07	1.75E-06	2.34E-06	5.54E-07	2.01E-05	2.50E-05
Indiana	Montgomery	956800	1079568	-86.96164	40.167194	3050	R	4.08E-07	1.44E-06	2.49E-06	6.65E-07	2.00E-05	2.50E-05
Indiana	Randolph Cou	951400	1359514	-84.917707	40.23705	2771	R	1.17E-07	2.19E-06	1.95E-06	5.30E-07	2.02E-05	2.50E-05
Indiana	Daviess Cour	954600	0279546	-87.15897	38.615441	3618	R	4.00E-07	1.76E-06	2.25E-06	5.36E-07	2.00E-05	2.49E-05
Indiana	Fountain Cou	957600	0459576	-87.202402	40.269336	3057	R	2.35E-07	1.51E-06	2.64E-06	6.48E-07	1.99E-05	2.49E-05
Indiana	Fountain Cou	957800	0459578	-87.383322	40.148297	3991	R	2.98E-07	2.20E-06	1.89E-06	5.52E-07	2.00E-05	2.49E-05
Indiana	Martin County	950300	1019503	-86.795188	38.631846	3608	R	4.78E-07	2.49E-06	1.50E-06	3.70E-07	2.00E-05	2.49E-05
Indiana	White County	958800	1819588	-86.863228	40.600244	3004	R	3.17E-07	1.18E-06	2.69E-06	9.09E-07	1.98E-05	2.49E-05
Indiana	White County	958700	1819587	-86.681198	40.76377	2744	R	1.96E-07	1.17E-06	2.66E-06	8.57E-07	1.99E-05	2.48E-05
Indiana	Cass County	951100	0179511	-86.513118	40.818181	3069	R	1.04E-07	1.61E-06	2.41E-06	6.65E-07	2.00E-05	2.47E-05
Indiana	Montgomery	956700	1079567	-86.781427	40.107648	2831	R	2.96E-07	1.30E-06	2.72E-06	7.25E-07	1.97E-05	2.47E-05
Indiana	Randolph Cou	952000	1359520	-84.903597	40.072045	3636	R	2.77E-07	2.03E-06	2.10E-06	5.18E-07	1.98E-05	2.47E-05
Indiana	Sullivan Cour	50500	153505	-87.365086	38.976869	2156	R	8.37E-07	1.21E-06	2.04E-06	4.98E-07	2.01E-05	2.47E-05
Indiana	Montgomery	957300	1079573	-87.004685	39.951141	3594	R	3.46E-07	1.33E-06	2.39E-06	5.58E-07	2.00E-05	2.46E-05
Indiana	Carroll Count	959400	0159594	-86.689708	40.65674	2073	R	2.46E-07	1.17E-06	2.61E-06	6.94E-07	1.98E-05	2.45E-05
Indiana	Daviess Cour	954400	0279544	-87.15566	38.72588	2465	R	3.60E-07	1.33E-06	2.18E-06	5.44E-07	2.01E-05	2.45E-05
Indiana	Pulaski Count	958900	1319589	-86.533507	41.049395	2726	R	2.21E-07	1.58E-06	2.10E-06	4.75E-07	2.01E-05	2.45E-05
Indiana	Washington C	967300	1759673	-86.177405	38.670581	4290	R	6.15E-08	2.11E-06	2.03E-06	4.22E-07	1.99E-05	2.45E-05
Indiana	White County	958500	1819585	-86.777145	40.778536	3239	R	1.34E-07	1.16E-06	2.47E-06	7.72E-07	2.00E-05	2.45E-05
Indiana	Knox County	955800	0839558	-87.353006	38.637776	3491	U	6.14E-07	1.28E-06	1.74E-06	5.91E-07	2.02E-05	2.44E-05
Indiana	Martin County	950100	1019501	-86.824416	38.742016	2545	R	2.73E-07	2.12E-06	1.52E-06	3.50E-07	2.02E-05	2.44E-05
Indiana	Parke County	30100	121301	-87.219508	39.864169	3418	R	2.00E-07	1.72E-06	1.96E-06	4.26E-07	2.01E-05	2.44E-05
Indiana	Fulton County	953400	0499534	-86.224572	40.982403	2782	R	8.12E-07	9.99E-07	1.80E-06	5.61E-07	2.00E-05	2.42E-05
Indiana	Martin County	950400	1019504	-86.865473	38.849618	382	R	5.35E-08	1.88E-06	1.75E-06	3.79E-07	2.00E-05	2.41E-05
Indiana	Daviess Cour	954300	0279543	-87.013101	38.855132	3835	R	1.48E-07	1.30E-06	2.09E-06	5.55E-07	1.99E-05	2.40E-05
Indiana	Warren Coun	951000	1719510	-87.256598	40.348425	4340	R	3.24E-07	1.13E-06	2.29E-06	5.68E-07	1.96E-05	2.40E-05
Indiana	White County	958400	1819584	-86.845751	40.712108	2173	R	1.42E-07	9.06E-07	2.25E-06	8.48E-07	1.98E-05	2.40E-05
Indiana	Daviess Cour	954500	0279545	-86.999114	38.704475	6563	R	2.43E-07	1.44E-06	1.87E-06	4.60E-07	1.99E-05	2.39E-05
Indiana	Fountain Cou	958000	0459580	-87.28966	40.006133	3612	R	2.15E-07	1.52E-06	1.70E-06	4.34E-07	2.00E-05	2.39E-05

NATA Findings – Indiana

Table D-3 Noncancer Risk County

Table D-3

NATA FINDINGS - INDIANA COUNTY LEVEL CUMULATIVE RISK ESTIMATES (NONCANCER) BASED ON 1996 DATA

EPA strongly cautions that these modeling results should not be used to draw conclusions about local concentrations or risk. The results are most meaningful when viewed at the state or national level; for smaller areas, the modeling becomes less certain. In addition, these results represent conditions in 1996 rather than current conditions.

- The exposure estimates presented below are representative of midrange estimates of population exposures. Due to a number of factors, some individuals may have substantially higher or lower exposures. It is important to note that the model, as applied on the national scale, is not designed to quantify these extreme values of individual exposures.
- Note that for certain chemicals, exposure pathways other than inhalation as well as indoor sources of air toxics may contribute substantially to total exposures of concern. This assessment does not address these other routes of exposure (i.e., ingestion or dermal) or inhalation exposure resulting from indoor sources.
- The emissions used in this assessment do not reflect potentially significant emission reductions that have taken effect since 1996, including those from: 1) mobile source regulations which are being phased in over time; 2) many of the air toxics regulations EPA has issued for major industrial sources; 3) State or industry initiatives; and 4) any facility closures.
- Methods of estimating emissions as well as simplified modeling assumptions may introduce significant uncertainties into each component of the assessment.
[For a discussion of limitations please see http://www.epa.gov/tnn/atw/nata/natslim2.html](http://www.epa.gov/tnn/atw/nata/natslim2.html)
- Because of these uncertainties, EPA will not use the results of this assessment to determine source-specific contributions or to set regulatory requirements. However, EPA expects to use these results to inform decisions about the priorities of the air toxics program as well as to guide the collection of additional data that could lead to regulatory decisions.

State	County	FIPS	Urban or Rural	Estimated Chronic Hazard Index												
				Percentile Distribution of Risk Across Census Tracts									Contribution to Average from ...			
				5th	10th	25th	Median	Average	75th	90th	95th	Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background
Indiana	Marion County	18097	U	5.40E+00	5.72E+00	6.12E+00	6.47E+00	6.43E+00	6.83E+00	7.23E+00	7.65E+00	9.68E-03	3.72E-01	4.46E+00	1.56E+00	2.53E-02
National	All Urban Counties	99998	U	7.35E-01	1.41E+00	2.72E+00	4.62E+00	6.11E+00	7.39E+00	1.19E+01	1.73E+01	1.67E-01	9.60E-01	2.91E+00	2.06E+00	2.50E-02
Indiana	Lake County	18089	U	3.43E+00	4.33E+00	5.01E+00	5.40E+00	5.41E+00	6.14E+00	6.94E+00	7.37E+00	1.49E-02	3.50E-01	3.82E+00	1.20E+00	2.50E-02
National	All	99999	-	3.86E-01	9.31E-01	1.92E+00	3.74E+00	5.36E+00	6.50E+00	1.09E+01	1.54E+01	1.42E-01	9.77E-01	2.49E+00	1.73E+00	2.50E-02
Indiana	Floyd County	18043	U	2.27E+00	3.03E+00	3.91E+00	5.66E+00	4.95E+00	5.96E+00	6.07E+00	6.13E+00	9.90E-01	6.30E-01	2.56E+00	7.45E-01	2.50E-02
Indiana	Clark County	18019	U	2.61E+00	2.79E+00	3.83E+00	5.53E+00	4.82E+00	5.90E+00	6.22E+00	6.25E+00	7.83E-01	5.52E-01	2.61E+00	8.46E-01	2.50E-02
Indiana	Johnson County	18081	U	2.67E+00	2.72E+00	3.48E+00	4.19E+00	4.08E+00	4.68E+00	5.06E+00	5.13E+00	7.22E-03	3.24E-01	2.59E+00	1.13E+00	2.50E-02
Indiana	State Urban Counties	18000	U	1.18E+00	1.55E+00	2.22E+00	3.35E+00	3.79E+00	5.58E+00	6.55E+00	7.00E+00	4.34E-02	3.67E-01	2.52E+00	8.32E-01	2.51E-02
Indiana	Hamilton County	18057	U	2.13E+00	2.42E+00	3.05E+00	4.01E+00	3.78E+00	4.63E+00	4.95E+00	5.01E+00	2.26E-03	2.80E-01	2.56E+00	9.10E-01	2.50E-02
Indiana	Hancock County	18059	U	2.72E+00	2.80E+00	3.29E+00	4.03E+00	3.77E+00	4.07E+00	4.17E+00	4.25E+00	4.31E-03	2.61E-01	2.71E+00	7.64E-01	2.51E-02
Indiana	St. Joseph County	18141	U	2.38E+00	2.79E+00	3.38E+00	3.68E+00	3.51E+00	3.93E+00	4.22E+00	4.37E+00	2.27E-03	3.30E-01	2.27E+00	8.77E-01	2.53E-02
Indiana	Hendricks County	18063	U	2.07E+00	2.23E+00	2.77E+00	3.44E+00	3.48E+00	4.06E+00	4.29E+00	4.32E+00	4.09E-03	2.53E-01	2.30E+00	9.02E-01	2.47E-02
Indiana	Vanderburgh County	18163	U	2.63E+00	2.85E+00	3.18E+00	3.49E+00	3.45E+00	3.74E+00	3.96E+00	4.18E+00	3.57E-03	4.63E-01	2.33E+00	6.25E-01	2.53E-02
Indiana	Porter County	18127	U	1.39E+00	1.95E+00	2.30E+00	3.32E+00	3.37E+00	3.81E+00	4.20E+00	4.30E+00	1.56E-02	3.30E-01	2.33E+00	6.67E-01	2.51E-02
Indiana	Monroe County	18105	U	2.08E+00	2.43E+00	2.84E+00	3.38E+00	3.35E+00	3.97E+00	4.43E+00	4.49E+00	5.45E-04	9.26E-01	1.74E+00	6.60E-01	2.50E-02
Indiana	State Total	18000	-	8.65E-01	1.05E+00	1.56E+00	2.63E+00	3.21E+00	4.39E+00	6.41E+00	6.77E+00	3.52E-02	3.61E-01	2.09E+00	6.92E-01	2.51E-02
Indiana	Elkhart County	18039	R	2.11E+00	2.16E+00	2.60E+00	3.03E+00	3.01E+00	3.46E+00	3.71E+00	3.91E+00	6.31E-03	2.82E-01	1.99E+00	7.07E-01	2.53E-02
Indiana	Dearborn County	18029	U	2.12E+00	2.13E+00	2.63E+00	3.17E+00	2.93E+00	3.29E+00	3.42E+00	3.47E+00	7.96E-02	6.94E-01	1.45E+00	6.84E-01	2.43E-02
Indiana	Morgan County	18109	U	2.25E+00	2.46E+00	2.59E+00	2.85E+00	2.85E+00	3.09E+00	3.61E+00	3.63E+00	4.68E-03	5.23E-01	1.60E+00	7.01E-01	2.45E-02
Indiana	Allen County	18003	U	1.91E+00	2.11E+00	2.58E+00	2.98E+00	2.83E+00	3.19E+00	3.40E+00	3.55E+00	7.56E-03	3.25E-01	1.89E+00	5.82E-01	2.54E-02
Indiana	Madison County	18095	U	1.80E+00	2.08E+00	2.41E+00	2.76E+00	2.70E+00	3.13E+00	3.51E+00	4.12E+00	6.47E-04	2.25E-01	1.95E+00	5.01E-01	2.49E-02
Indiana	Harrison County	18061	U	2.00E+00	2.09E+00	2.38E+00	2.73E+00	2.70E+00	3.01E+00	3.34E+00	3.47E+00	4.25E-01	6.24E-01	1.24E+00	3.83E-01	2.40E-02
Indiana	Ohio County	18115	U	1.95E+00	2.01E+00	2.18E+00	2.48E+00	2.45E+00	2.77E+00	2.94E+00	3.00E+00	5.22E-02	6.83E-01	1.23E+00	4.58E-01	2.42E-02
Indiana	Boone County	18011	U	1.21E+00	1.36E+00	1.98E+00	2.18E+00	2.37E+00	2.28E+00	3.20E+00	3.45E+00	1.69E-03	2.41E-01	1.50E+00	5.93E-01	2.47E-02
Indiana	Shelby County	18145	U	1.75E+00	1.80E+00	1.99E+00	2.27E+00	2.31E+00	2.32E+00	2.59E+00	2.76E+00	7.76E-03	2.32E-01	1.53E+00	5.15E-01	2.49E-02
Indiana	Vigo County	18167	U	1.59E+00	1.71E+00	2.15E+00	2.33E+00	2.25E+00	2.66E+00	2.75E+00	2.83E+00	2.56E-03	4.12E-01	1.50E+00	3.05E-01	2.50E-02
Indiana	Warrick County	18173	U	1.61E+00	1.68E+00	1.92E+00	2.28E+00	2.24E+00	2.44E+00	2.54E+00	2.64E+00	1.92E-03	5.39E-01	1.38E+00	2.94E-01	2.51E-02
Indiana	Brown County	18013	R	1.84E+00	1.91E+00	2.10E+00	2.21E+00	2.21E+00	2.37E+00	2.64E+00	2.73E+00	1.72E-03	7.46E-01	1.02E+00	4.15E-01	2.47E-02
Indiana	Tippecanoe County	18157	U	1.19E+00	1.40E+00	1.80E+00	2.07E+00	2.19E+00	2.55E+00	3.01E+00	3.12E+00	1.22E-03	3.98E-01	1.40E+00	3.67E-01	2.46E-02
Indiana	Howard County	18067	U	1.51E+00	1.67E+00	1.96E+00	2.32E+00	2.15E+00	2.40E+00	2.55E+00	2.73E+00	3.49E-03	1.86E-01	1.55E+00	3.82E-01	2.53E-02
Indiana	Delaware County	18035	U	1.52E+00	1.67E+00	1.95E+00	2.25E+00	2.14E+00	2.47E+00	2.67E+00	2.72E+00	3.15E-04	1.96E-01	1.38E+00	5.37E-01	2.50E-02
National	All Rural Counties	99998	R	1.14E-01	3.43E-01	9.36E-01	1.58E+00	1.98E+00	2.35E+00	3.38E+00	4.24E+00	3.08E-02	1.06E+00	6.13E-01	2.50E-01	2.52E-02
Indiana	Perry County	18123	R	1.32E+00	1.34E+00	1.38E+00	2.11E+00	1.90E+00	2.28E+00	2.35E+00	2.38E+00	2.27E-03	1.08E+00	6.48E-01	1.50E-01	2.54E-02
Indiana	La Porte County	18091	U	1.47E+00	1.60E+00	1.65E+00	1.94E+00	1.88E+00	2.05E+00	2.11E+00	2.35E+00	1.51E-02	2.81E-01	1.16E+00	3.97E-01	2.51E-02

				Estimated Chronic Hazard Index												
State	County	FIPS	Urban or Rural	Percentile Distribution of Risk Across Census Tracts							Contribution to Average from ...					
				5th	10th	25th	Median	Average	75th	90th	95th	Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background
Indiana	Lawrence County	18093	R	1.30E+00	1.31E+00	1.44E+00	1.77E+00	1.79E+00	2.30E+00	2.50E+00	2.61E+00	4.47E-04	7.15E-01	7.82E-01	2.71E-01	2.51E-02
Indiana	Kosciusko County	18085	R	1.30E+00	1.37E+00	1.58E+00	1.65E+00	1.71E+00	1.75E+00	1.98E+00	2.04E+00	1.59E-02	1.90E-01	9.31E-01	5.51E-01	2.53E-02
Indiana	Bartholomew County	18005	R	1.29E+00	1.33E+00	1.52E+00	1.68E+00	1.70E+00	1.98E+00	2.12E+00	2.18E+00	4.07E-03	3.60E-01	9.68E-01	3.39E-01	2.52E-02
Indiana	Lagrange County	18087	R	1.42E+00	1.46E+00	1.56E+00	1.64E+00	1.67E+00	1.75E+00	1.83E+00	1.90E+00	7.15E-03	2.25E-01	8.37E-01	5.81E-01	2.52E-02
Indiana	Scott County	18143	U	1.38E+00	1.43E+00	1.59E+00	1.73E+00	1.67E+00	1.76E+00	1.83E+00	1.85E+00	2.85E-02	5.86E-01	8.25E-01	2.06E-01	2.48E-02
Indiana	Jefferson County	18077	U	1.23E+00	1.27E+00	1.33E+00	1.72E+00	1.66E+00	1.82E+00	2.07E+00	2.18E+00	1.71E-02	7.57E-01	6.91E-01	1.67E-01	2.52E-02
Indiana	Henry County	18065	R	1.15E+00	1.22E+00	1.41E+00	1.74E+00	1.65E+00	1.88E+00	2.06E+00	2.23E+00	5.41E-04	2.07E-01	1.11E+00	3.06E-01	2.50E-02
Indiana	Huntington County	18069	U	9.90E-01	1.02E+00	1.11E+00	1.70E+00	1.63E+00	2.00E+00	2.14E+00	2.29E+00	6.36E-03	4.01E-01	9.07E-01	2.93E-01	2.52E-02
Indiana	Marshall County	18099	R	1.04E+00	1.11E+00	1.36E+00	1.47E+00	1.61E+00	2.00E+00	2.08E+00	2.09E+00	2.49E-03	2.07E-01	9.98E-01	3.75E-01	2.52E-02
Indiana	Grant County	18053	U	1.19E+00	1.25E+00	1.39E+00	1.60E+00	1.60E+00	1.74E+00	2.02E+00	2.17E+00	1.97E-03	2.25E-01	1.06E+00	2.87E-01	2.52E-02
Indiana	Franklin County	18047	R	1.22E+00	1.24E+00	1.28E+00	1.35E+00	1.59E+00	2.06E+00	2.07E+00	2.07E+00	7.31E-02	4.53E-01	7.85E-01	2.58E-01	2.46E-02
Indiana	Noble County	18113	R	1.38E+00	1.40E+00	1.45E+00	1.46E+00	1.58E+00	1.54E+00	1.90E+00	2.14E+00	2.00E-02	2.80E-01	8.97E-01	3.61E-01	2.52E-02
Indiana	Orange County	18117	R	1.19E+00	1.19E+00	1.21E+00	1.27E+00	1.55E+00	1.56E+00	2.13E+00	2.37E+00	7.68E-03	8.13E-01	5.62E-01	1.40E-01	2.50E-02
Indiana	Jennings County	18079	R	1.09E+00	1.09E+00	1.11E+00	1.19E+00	1.54E+00	1.43E+00	2.97E+00	3.49E+00	9.99E-03	6.85E-01	6.38E-01	1.77E-01	2.50E-02
Indiana	State Rural Counties	18000	R	6.44E-01	7.73E-01	1.00E+00	1.34E+00	1.53E+00	1.74E+00	2.40E+00	2.90E+00	1.13E-02	3.42E-01	8.62E-01	2.91E-01	2.50E-02
Indiana	Washington County	18175	R	1.17E+00	1.18E+00	1.26E+00	1.45E+00	1.52E+00	1.62E+00	1.95E+00	2.09E+00	7.86E-02	5.98E-01	6.48E-01	1.68E-01	2.43E-02
Indiana	Jackson County	18071	R	1.14E+00	1.15E+00	1.23E+00	1.65E+00	1.51E+00	1.76E+00	1.84E+00	1.95E+00	2.81E-03	5.53E-01	6.94E-01	2.35E-01	2.51E-02
Indiana	Greene County	18055	R	9.16E-01	9.83E-01	1.06E+00	1.31E+00	1.50E+00	2.21E+00	2.48E+00	2.51E+00	1.33E-03	6.49E-01	6.12E-01	2.11E-01	2.51E-02
Indiana	De Kalb County	18033	U	1.10E+00	1.12E+00	1.29E+00	1.51E+00	1.48E+00	1.65E+00	1.71E+00	1.76E+00	5.81E-03	2.42E-01	9.32E-01	2.73E-01	2.53E-02
Indiana	Dubois County	18037	R	1.11E+00	1.14E+00	1.17E+00	1.54E+00	1.48E+00	1.77E+00	1.83E+00	1.84E+00	1.32E-02	5.73E-01	6.78E-01	1.90E-01	2.53E-02
Indiana	Crawford County	18025	R	1.27E+00	1.31E+00	1.41E+00	1.57E+00	1.47E+00	1.61E+00	1.63E+00	1.64E+00	1.09E-01	6.76E-01	5.25E-01	1.34E-01	2.41E-02
Indiana	Posey County	18129	U	1.18E+00	1.24E+00	1.40E+00	1.47E+00	1.47E+00	1.59E+00	1.64E+00	1.66E+00	6.33E-03	3.15E-01	8.87E-01	2.34E-01	2.49E-02
Indiana	Owen County	18119	R	1.31E+00	1.31E+00	1.33E+00	1.42E+00	1.46E+00	1.46E+00	1.60E+00	1.65E+00	7.07E-04	5.26E-01	7.02E-01	2.06E-01	2.36E-02
Indiana	Whitley County	18183	U	1.27E+00	1.31E+00	1.39E+00	1.50E+00	1.44E+00	1.52E+00	1.55E+00	1.57E+00	6.56E-03	2.10E-01	8.81E-01	3.19E-01	2.50E-02
Indiana	Clay County	18021	R	1.04E+00	1.05E+00	1.07E+00	1.21E+00	1.44E+00	1.53E+00	1.87E+00	1.99E+00	1.28E-03	4.84E-01	7.56E-01	1.71E-01	2.51E-02
Indiana	Fayette County	18041	U	9.68E-01	9.90E-01	1.08E+00	1.49E+00	1.42E+00	1.73E+00	1.74E+00	1.74E+00	7.47E-04	4.15E-01	7.85E-01	1.95E-01	2.51E-02
Indiana	Ripley County	18137	R	1.11E+00	1.14E+00	1.28E+00	1.50E+00	1.41E+00	1.53E+00	1.58E+00	1.61E+00	1.24E-01	4.40E-01	6.26E-01	1.96E-01	2.42E-02
Indiana	Spencer County	18147	R	1.32E+00	1.33E+00	1.36E+00	1.39E+00	1.38E+00	1.41E+00	1.48E+00	1.51E+00	2.16E-03	4.71E-01	7.36E-01	1.48E-01	2.51E-02
Indiana	Blackford County	18009	U	1.03E+00	1.04E+00	1.07E+00	1.40E+00	1.37E+00	1.72E+00	1.73E+00	1.73E+00	2.76E-03	2.92E-01	8.21E-01	2.30E-01	2.51E-02
Indiana	Switzerland County	18155	R	1.18E+00	1.18E+00	1.18E+00	1.18E+00	1.34E+00	1.40E+00	1.52E+00	1.57E+00	3.10E-02	5.27E-01	5.79E-01	1.80E-01	2.42E-02
Indiana	Clinton County	18023	R	9.68E-01	9.96E-01	1.07E+00	1.37E+00	1.33E+00	1.56E+00	1.74E+00	1.85E+00	2.49E-03	1.37E-01	8.97E-01	2.71E-01	2.49E-02
Indiana	Miami County	18103	R	8.66E-01	9.35E-01	9.84E-01	1.05E+00	1.33E+00	1.63E+00	2.08E+00	2.41E+00	4.76E-03	3.78E-01	7.28E-01	1.96E-01	2.50E-02
Indiana	Wayne County	18177	U	9.01E-01	9.35E-01	9.65E-01	1.30E+00	1.32E+00	1.57E+00	1.88E+00	2.07E+00	2.50E-03	2.96E-01	8.10E-01	1.91E-01	2.53E-02
Indiana	Wabash County	18169	U	9.34E-01	9.42E-01	9.74E-01	1.18E+00	1.31E+00	1.65E+00	1.80E+00	1.81E+00	7.82E-02	2.71E-01	7.00E-01	2.32E-01	2.54E-02
Indiana	Putnam County	18133	R	1.01E+00	1.03E+00	1.11E+00	1.20E+00	1.29E+00	1.40E+00	1.49E+00	1.50E+00	7.18E-04	3.81E-01	6.77E-01	2.08E-01	2.41E-02
Indiana	Cass County	18017	R	8.34E-01	8.97E-01	9.65E-01	1.06E+00	1.27E+00	1.60E+00	1.73E+00	1.78E+00	2.00E-03	2.56E-01	7.78E-01	2.10E-01	2.53E-02
Indiana	Gibson County	18051	R	9.78E-01	9.91E-01	1.03E+00	1.15E+00	1.27E+00	1.30E+00	1.48E+00	1.54E+00	1.91E-03	2.81E-01	7.64E-01	1.94E-01	2.50E-02
Indiana	Steuben County	18151	R	9.38E-01	9.42E-01	9.98E-01	1.19E+00	1.26E+00	1.45E+00	1.53E+00	1.66E+00	8.43E-02	2.48E-01	6.68E-01	2.38E-01	2.53E-02
Indiana	Tipton County	18159	R	1.09E+00	1.10E+00	1.12E+00	1.18E+00	1.19E+00	1.24E+00	1.25E+00	1.26E+00	1.02E-03	9.37E-02	8.49E-01	2.20E-01	2.47E-02
Indiana	Martin County	18101	R	1.01E+00	1.02E+00	1.05E+00	1.08E+00	1.18E+00	1.18E+00	1.34E+00	1.40E+00	2.04E-03	6.31E-01	4.20E-01	1.09E-01	2.55E-02
Indiana	Vermillion County	18165	R	7.47E-01	7.91E-01	9.23E-01	1.12E+00	1.17E+00	1.28E+00	1.48E+00	1.55E+00	2.36E-03	3.20E-01	6.83E-01	1.35E-01	2.52E-02
Indiana	Decatur County	18031	R	9.76E-01	9.79E-01	9.96E-01	1.04E+00	1.16E+00	1.17E+00	1.51E+00	1.66E+00	2.64E-02	2.73E-01	6.40E-01	1.99E-01	2.47E-02
Indiana	Montgomery County	18107	R	7.63E-01	8.00E-01	8.67E-01	9.10E-01	1.15E+00	1.56E+00	1.59E+00	1.60E+00	9.06E-04	2.75E-01	6.62E-01	1.91E-01	2.49E-02
Indiana	Rush County	18139	R	7.50E-01	7.82E-01	8.79E-01	1.31E+00	1.13E+00	1.41E+00	1.42E+00	1.42E+00	1.39E-03	1.74E-01	7.21E-01	2.09E-01	2.42E-02
Indiana	Wells County	18179	U	9.02E-01	9.74E-01	1.08E+00	1.10E+00	1.11E+00	1.18E+00	1.25E+00	1.29E+00	1.44E-03	1.62E-01	7.08E-01	2.13E-01	2.51E-02
Indiana	Adams County	18001	U	6.98E-01	7.01E-01	7.93E-01	1.07E+00	1.10E+00	1.33E+00	1.55E+00	1.57E+00	1.13E-03	1.79E-01	6.86E-01	2.11E-01	2.51E-02
Indiana	Daviess County	18027	R	8.10E-01	8.23E-01	8.46E-01	9.48E-01	1.07E+00	1.23E+00	1.45E+00	1.59E+00	1.81E-03	3.23E-01	5.61E-01	1.62E-01	2.52E-02
Indiana	Sullivan County	18153	R	7.65E-01	7.75E-01	8.06E-01	9.78E-01	1.06E+00	1.16E+00	1.20E+00	1.22E+00	3.17E-03	2.99E-01	6.08E-01	1.26E-01	2.51E-02
Indiana	Parke County	18121	R	8.30E-01	8.57E-01	9.35E-01	1.00E+00	1.06E+00	1.11E+00	1.28E+00	1.33E+00	2.20E-03	3.80E-01	5.38E-01	1.11E-01	2.50E-02
Indiana	Starke County	18149	R	8.76E-01	8.81E-01	8.96E-01	9.25E-01	1.05E+00	1.18E+00	1.33E+00	1.35E+00	2.67E-03	1.65E-01	6.66E-01	1.89E-01	2.49E-02
Indiana	Pike County	18125	R	8.74E-01	8.87E-01	9.28E-01	1.05E+00	1.04E+00	1.16E+00	1.17E+00	2.33E-03	3.82E-01	5.08E-01	1.18E-01	2.51E-02	
Indiana	Carroll County	18015	R	8.64E-01	8.64E-01	9.31E-01	1.00E+00	1.02E+00	1.05E+00	1.14E+00</td						

				Estimated Chronic Hazard Index												
State	County	FIPS	Urban or Rural	Percentile Distribution of Risk Across Census Tracts								Contribution to Average from ...				
				5th	10th	25th	Median	Average	75th	90th	95th	Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background
Indiana	Union County	18161	R	8.92E-01	9.09E-01	9.59E-01	1.04E+00	1.01E+00	1.13E+00	1.18E+00	1.19E+00	1.45E-03	2.27E-01	5.83E-01	1.74E-01	2.44E-02
Indiana	Knox County	18083	U	7.10E-01	7.12E-01	7.28E-01	1.06E+00	1.00E+00	1.23E+00	1.41E+00	1.43E+00	6.56E-03	3.00E-01	5.13E-01	1.58E-01	2.54E-02
Indiana	Fulton County	18049	R	6.22E-01	6.26E-01	6.66E-01	7.65E-01	8.58E-01	7.76E-01	9.84E-01	1.09E+00	1.14E-03	1.57E-01	4.95E-01	1.81E-01	2.53E-02
Indiana	Randolph County	18135	R	6.46E-01	6.50E-01	7.67E-01	8.15E-01	8.43E-01	9.46E-01	1.01E+00	1.01E+00	3.06E-04	1.04E-01	5.51E-01	1.62E-01	2.51E-02
Indiana	Jay County	18075	R	5.96E-01	6.06E-01	6.79E-01	8.85E-01	8.26E-01	9.54E-01	9.86E-01	1.01E+00	5.11E-04	1.38E-01	5.05E-01	1.58E-01	2.52E-02
Indiana	Fountain County	18045	R	6.79E-01	6.87E-01	7.13E-01	7.14E-01	8.22E-01	8.12E-01	1.17E+00	1.28E+00	1.12E-03	2.35E-01	4.42E-01	1.18E-01	2.52E-02
Indiana	Newton County	18111	R	4.00E-01	4.10E-01	4.42E-01	5.28E-01	8.03E-01	7.80E-01	1.11E+00	1.22E+00	7.62E-04	7.72E-02	5.14E-01	1.89E-01	2.42E-02
Indiana	Jasper County	18073	R	5.18E-01	5.58E-01	6.39E-01	7.06E-01	7.83E-01	8.41E-01	9.78E-01	1.03E+00	1.65E-03	8.06E-02	5.23E-01	1.55E-01	2.43E-02
Indiana	White County	18181	R	5.38E-01	5.59E-01	6.29E-01	7.38E-01	7.81E-01	7.86E-01	8.91E-01	9.96E-01	2.93E-04	1.21E-01	4.88E-01	1.47E-01	2.50E-02
Indiana	Pulaski County	18131	R	5.46E-01	5.58E-01	5.96E-01	6.68E-01	6.79E-01	7.47E-01	7.99E-01	8.17E-01	4.16E-04	1.49E-01	4.10E-01	9.43E-02	2.53E-02
Indiana	Warren County	18171	R	6.06E-01	6.09E-01	6.16E-01	6.27E-01	6.28E-01	6.39E-01	6.45E-01	6.48E-01	5.15E-04	1.21E-01	3.87E-01	9.50E-02	2.46E-02
Indiana	Benton County	18007	R	3.79E-01	3.90E-01	4.21E-01	4.73E-01	4.79E-01	5.22E-01	5.51E-01	5.61E-01	1.86E-04	4.70E-02	3.28E-01	7.91E-02	2.47E-02

NATA Findings – Indiana

Table D-4 Top 100 Census (Cancer)

Table D-4

NATA FINDINGS - INDIANA TOP 100 CENSUS TRACT LEVEL CUMULATIVE RISK ESTIMATES (CANCER) BASED ON 1996 DATA

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Allen County	2200	00322	-85.173736	41.064748	2881	U	1.65E-05	6.21E-04	1.41E-05	3.58E-06	2.01E-05	6.75E-04
Indiana	Marion Count	342600	0973426	-86.202501	39.755109	3960	U	4.59E-04	4.76E-05	2.87E-05	7.56E-06	1.99E-05	5.63E-04
Indiana	Marion Count	358100	0973581	-86.191174	39.748633	3854	U	3.92E-04	4.69E-05	2.38E-05	6.67E-06	2.00E-05	4.90E-04
Indiana	Adams Count	30200	001302	-84.940355	40.829529	4131	U	9.37E-07	4.11E-04	6.41E-06	1.70E-06	2.01E-05	4.40E-04
Indiana	Adams Count	30300	001303	-84.92039	40.826527	6262	U	7.44E-07	4.07E-04	6.11E-06	1.64E-06	2.00E-05	4.35E-04
Indiana	Vigo County	1900	16719	-87.416672	39.438136	1658	U	7.16E-07	3.84E-04	1.12E-05	1.84E-06	1.99E-05	4.17E-04
Indiana	Allen County	1000	00310	-85.162751	41.078933	1490	U	3.89E-05	2.87E-04	1.24E-05	3.57E-06	2.00E-05	3.62E-04
Indiana	Marion Count	342500	0973425	-86.236157	39.756514	4953	U	2.40E-04	4.48E-05	2.39E-05	6.37E-06	2.00E-05	3.35E-04
Indiana	Marion Count	342400	0973424	-86.221243	39.74137	1877	U	2.42E-04	3.64E-05	2.11E-05	7.48E-06	2.00E-05	3.27E-04
Indiana	Marion Count	356400	0973564	-86.189653	39.765651	4360	U	1.83E-04	3.52E-05	2.53E-05	6.18E-06	2.01E-05	2.70E-04
Indiana	Steuben Cou	970900	1519709	-85.014291	41.731284	2250	R	2.36E-04	7.83E-06	3.15E-06	8.72E-07	2.01E-05	2.68E-04
Indiana	Marion Count	330600	0973306	-86.03657	39.846417	5323	U	1.56E-05	1.98E-04	2.73E-05	5.88E-06	2.00E-05	2.66E-04
Indiana	Marion Count	341400	0973414	-86.202527	39.768501	2239	U	1.75E-04	3.51E-05	2.97E-05	6.70E-06	2.01E-05	2.66E-04
Indiana	Marion Count	356900	0973569	-86.154908	39.746153	3410	U	1.25E-04	5.81E-05	3.90E-05	1.03E-05	2.01E-05	2.52E-04
Indiana	Marion Count	356300	0973563	-86.162217	39.758241	537	U	1.41E-04	4.29E-05	3.10E-05	1.15E-05	2.01E-05	2.46E-04
Indiana	Allen County	2100	00321	-85.15526	41.06502	2815	U	1.50E-05	1.79E-04	1.49E-05	4.23E-06	2.01E-05	2.33E-04
Indiana	Allen County	1100	00311	-85.152418	41.074997	1994	U	2.35E-05	1.70E-04	1.53E-05	3.86E-06	2.00E-05	2.32E-04
Indiana	Marion Count	342200	0973422	-86.258157	39.752427	5967	U	1.19E-04	6.00E-05	2.23E-05	7.10E-06	2.00E-05	2.29E-04
Indiana	Allen County	900	0039	-85.166024	41.087011	3534	U	1.39E-05	1.61E-04	1.69E-05	4.30E-06	2.00E-05	2.17E-04
Indiana	Marion Count	358000	0973580	-86.163134	39.738107	1875	U	1.12E-04	4.31E-05	2.53E-05	8.31E-06	2.00E-05	2.09E-04
Indiana	Bartholomew	10700	005107	-85.893178	39.210157	3618	R	2.77E-06	1.71E-04	7.52E-06	1.51E-06	1.99E-05	2.03E-04
Indiana	Marion Count	341500	0973415	-86.211178	39.772973	1728	U	1.20E-04	2.63E-05	2.56E-05	7.22E-06	2.01E-05	1.99E-04
Indiana	Marion Count	356200	0973562	-86.150981	39.762226	1963	U	1.04E-04	3.50E-05	3.09E-05	7.76E-06	2.01E-05	1.98E-04
Indiana	Marion Count	357000	0973570	-86.145893	39.746005	3430	U	1.06E-04	3.02E-05	3.39E-05	7.53E-06	2.00E-05	1.98E-04
Indiana	Marion Count	357800	0973578	-86.146806	39.737395	2330	U	8.71E-05	4.29E-05	3.61E-05	9.06E-06	1.98E-05	1.95E-04
Indiana	Elkhart Count	2300	03923	-85.991025	41.674214	2664	R	8.29E-06	1.41E-04	1.86E-05	2.81E-06	2.01E-05	1.91E-04
Indiana	Marion Count	357100	0973571	-86.136087	39.747431	2825	U	1.01E-04	2.62E-05	3.26E-05	7.46E-06	2.01E-05	1.87E-04
Indiana	Marion Count	357200	0973572	-86.126612	39.750709	4336	U	9.79E-05	2.64E-05	3.47E-05	7.75E-06	2.02E-05	1.87E-04
Indiana	Marion Count	355900	0973559	-86.136766	39.756058	3402	U	1.01E-04	2.42E-05	3.25E-05	7.74E-06	2.00E-05	1.86E-04
Indiana	Marion Count	341700	0973417	-86.227314	39.770805	5478	U	1.01E-04	2.72E-05	2.02E-05	5.54E-06	1.99E-05	1.74E-04
Indiana	Marion Count	341600	0973416	-86.206385	39.778038	2999	U	9.40E-05	2.09E-05	2.85E-05	6.86E-06	2.00E-05	1.70E-04
Indiana	Adams Count	30600	001306	-84.952932	40.656482	3374	U	3.38E-07	1.43E-04	4.28E-06	1.06E-06	1.98E-05	1.68E-04

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Allen County	1200	00312	-85.145184	41.076104	1320	U	1.36E-05	1.15E-04	1.44E-05	3.56E-06	2.01E-05	1.67E-04
Indiana	Madison Cou	900	0959	-85.670671	40.09294	2239	U	2.08E-06	1.16E-04	2.45E-05	4.16E-06	2.00E-05	1.67E-04
Indiana	Marion Count	354100	0973541	-86.158425	39.776894	1597	U	7.29E-05	2.49E-05	4.02E-05	7.33E-06	2.01E-05	1.65E-04
Indiana	Marion Count	353900	0973539	-86.180543	39.776846	972	U	7.91E-05	2.93E-05	2.87E-05	7.15E-06	2.02E-05	1.64E-04
Indiana	Allen County	600	0036	-85.150254	41.086107	2274	U	1.16E-05	1.12E-04	1.48E-05	3.80E-06	2.00E-05	1.62E-04
Indiana	Lake County	12000	089120	-87.309556	41.580456	2645	U	2.07E-05	1.04E-04	1.16E-05	6.63E-06	1.99E-05	1.62E-04
Indiana	Marion Count	354200	0973542	-86.150128	39.775414	3547	U	6.98E-05	2.40E-05	3.91E-05	7.15E-06	2.01E-05	1.60E-04
Indiana	Allen County	2400	00324	-85.169531	41.050518	1795	U	8.03E-06	1.14E-04	1.34E-05	3.64E-06	2.01E-05	1.59E-04
Indiana	La Porte Cou	42300	091423	-86.719446	41.61004	2428	U	1.23E-05	1.06E-04	1.51E-05	4.32E-06	2.01E-05	1.58E-04
Indiana	Allen County	2000	00320	-85.145922	41.063383	3188	U	1.04E-05	1.05E-04	1.67E-05	4.54E-06	2.01E-05	1.57E-04
Indiana	Marion Count	355700	0973557	-86.12557	39.761425	3210	U	8.04E-05	2.24E-05	2.68E-05	6.42E-06	2.00E-05	1.56E-04
Indiana	Marion Count	354700	0973547	-86.123673	39.774672	2638	U	5.94E-05	2.17E-05	4.28E-05	8.53E-06	2.01E-05	1.53E-04
Indiana	Marion Count	357300	0973573	-86.12196	39.742605	2311	U	7.60E-05	2.38E-05	2.53E-05	6.16E-06	2.02E-05	1.52E-04
Indiana	La Porte Cou	42100	091421	-86.703457	41.610461	6368	U	1.72E-05	9.88E-05	9.20E-06	2.99E-06	2.02E-05	1.48E-04
Indiana	Marion Count	341200	0973412	-86.203927	39.783914	3362	U	7.17E-05	1.99E-05	3.02E-05	6.53E-06	2.00E-05	1.48E-04
Indiana	Marion Count	342197	0973421.97	-86.278388	39.749976	3527	U	6.73E-05	2.29E-05	2.68E-05	1.05E-05	1.98E-05	1.47E-04
Indiana	Marion Count	354500	0973545	-86.128723	39.772576	3728	U	6.53E-05	2.09E-05	3.39E-05	7.06E-06	2.01E-05	1.47E-04
Indiana	Marion Count	355600	0973556	-86.110297	39.762446	2462	U	7.27E-05	2.31E-05	2.50E-05	6.26E-06	2.00E-05	1.47E-04
Indiana	Elkhart Count	1700	03917	-85.958157	41.720993	6387	R	5.93E-05	4.53E-05	1.70E-05	2.87E-06	2.00E-05	1.45E-04
Indiana	Marion Count	354400	0973544	-86.136809	39.771214	1820	U	6.55E-05	2.11E-05	3.11E-05	6.97E-06	2.00E-05	1.45E-04
Indiana	Allen County	800	0038	-85.16227	41.094445	4334	U	8.82E-06	9.77E-05	1.36E-05	3.43E-06	1.99E-05	1.43E-04
Indiana	Marion Count	353500	0973535	-86.171537	39.781504	1909	U	6.11E-05	3.00E-05	2.52E-05	6.44E-06	1.99E-05	1.43E-04
Indiana	Marion Count	357900	0973579	-86.147065	39.729291	4296	U	6.61E-05	2.55E-05	2.57E-05	6.31E-06	1.99E-05	1.43E-04
Indiana	Allen County	1900	00319	-85.14247	41.067311	981	U	1.01E-05	9.35E-05	1.48E-05	3.72E-06	1.98E-05	1.42E-04
Indiana	Marion Count	342300	0973423	-86.238422	39.728823	6712	U	6.67E-05	2.29E-05	2.36E-05	7.05E-06	1.99E-05	1.40E-04
Indiana	Marion Count	357400	0973574	-86.094303	39.746142	4992	U	6.63E-05	2.12E-05	2.61E-05	6.22E-06	2.02E-05	1.40E-04
Indiana	Marion Count	361200	0973612	-86.073646	39.762824	3782	U	5.17E-05	2.58E-05	3.33E-05	7.86E-06	2.01E-05	1.39E-04
Indiana	Marion Count	355000	0973550	-86.115388	39.771407	3492	U	5.96E-05	2.00E-05	3.10E-05	6.71E-06	2.00E-05	1.37E-04
Indiana	Elkhart Count	2400	03924	-85.990442	41.686907	4533	R	9.26E-06	8.86E-05	1.57E-05	2.37E-06	2.02E-05	1.36E-04
Indiana	Marion Count	355100	0973551	-86.101144	39.770982	2780	U	5.61E-05	2.11E-05	3.16E-05	6.69E-06	2.01E-05	1.36E-04
Indiana	Lake County	12900	089129	-87.325844	41.577661	1827	U	2.03E-05	7.33E-05	1.54E-05	6.33E-06	2.01E-05	1.35E-04
Indiana	Lake County	40100	089401	-87.490312	41.671772	1570	U	6.74E-05	1.82E-05	1.31E-05	1.62E-05	2.00E-05	1.35E-04
Indiana	Marion Count	357600	0973576	-86.124728	39.731347	7575	U	6.05E-05	2.12E-05	2.64E-05	6.43E-06	1.98E-05	1.34E-04
Indiana	Marion Count	355500	0973555	-86.091429	39.761059	3721	U	6.31E-05	1.84E-05	2.59E-05	6.10E-06	1.99E-05	1.33E-04
Indiana	Marion Count	341100	0973411	-86.217453	39.783767	2273	U	5.81E-05	2.04E-05	2.68E-05	6.68E-06	1.99E-05	1.32E-04

State	County	Tract ID	COTract	Lat	Long	Population	Urban or Rural	Estimated Risk (Combined)					
								Major	Area and Other	Onroad Mobile	Nonroad Mobile	Estimated Background	Total
Indiana	Marion Count	353200	0973532	-86.148615	39.788111	1823	U	4.78E-05	2.03E-05	3.59E-05	6.68E-06	2.01E-05	1.31E-04
Indiana	Allen County	701	0037.01	-85.148995	41.094549	3435	U	7.73E-06	8.27E-05	1.51E-05	4.01E-06	2.01E-05	1.30E-04
Indiana	Bartholomew	10800	005108	-85.892589	39.196646	4080	R	2.57E-06	1.00E-04	5.31E-06	1.38E-06	2.00E-05	1.30E-04
Indiana	Marion Count	354800	0973548	-86.117144	39.777639	2591	U	5.20E-05	1.88E-05	3.21E-05	6.79E-06	2.01E-05	1.30E-04
Indiana	Marion Count	361300	0973613	-86.039737	39.765564	2638	U	3.62E-05	3.22E-05	3.29E-05	8.48E-06	1.99E-05	1.30E-04
Indiana	Allen County	1500	00315	-85.104964	41.07415	1379	U	4.62E-06	8.29E-05	1.74E-05	4.38E-06	2.02E-05	1.29E-04
Indiana	Madison Cou	800	0958	-85.676998	40.093113	2534	U	1.07E-06	8.03E-05	2.41E-05	3.96E-06	1.99E-05	1.29E-04
Indiana	Marion Count	354900	0973549	-86.105326	39.778013	3265	U	5.04E-05	2.10E-05	3.06E-05	6.82E-06	2.00E-05	1.29E-04
Indiana	Miami County	952300	1039523	-86.080756	40.749337	3097	R	1.99E-06	1.00E-04	5.46E-06	9.07E-07	2.00E-05	1.29E-04
Indiana	Marion Count	355400	0973554	-86.090492	39.771224	3508	U	4.93E-05	1.82E-05	3.14E-05	7.36E-06	2.00E-05	1.26E-04
Indiana	Kosciusko Co	962000	0859620	-85.835378	41.244587	3809	R	6.78E-05	2.81E-05	6.48E-06	2.68E-06	1.99E-05	1.25E-04
Indiana	La Porte Cou	42000	091420	-86.715862	41.633963	2211	U	1.16E-05	8.44E-05	5.96E-06	2.23E-06	2.01E-05	1.24E-04
Indiana	Marion Count	353100	0973531	-86.142837	39.791309	895	U	4.25E-05	2.77E-05	2.77E-05	5.63E-06	2.01E-05	1.24E-04
Indiana	Wabash Cour	992800	1699928	-85.831806	40.787562	4042	U	9.22E-05	5.03E-06	4.56E-06	1.23E-06	2.01E-05	1.23E-04
Indiana	Marion Count	351100	0973511	-86.181716	39.81329	2895	U	3.18E-05	2.40E-05	3.14E-05	1.38E-05	1.99E-05	1.21E-04
Indiana	Allen County	1300	00313	-85.132957	41.079739	1673	U	1.06E-05	7.29E-05	1.30E-05	3.13E-06	2.01E-05	1.20E-04
Indiana	Marion Count	353600	0973536	-86.186856	39.792973	3410	U	4.98E-05	1.99E-05	2.39E-05	6.01E-06	2.00E-05	1.20E-04
Indiana	Marion Count	361100	0973611	-86.07331	39.771068	3685	U	4.31E-05	1.82E-05	3.19E-05	7.12E-06	1.98E-05	1.20E-04
Indiana	Lake County	12800	089128	-87.332553	41.574248	1940	U	1.93E-05	6.20E-05	1.21E-05	5.64E-06	2.01E-05	1.19E-04
Indiana	Marion Count	353300	0973533	-86.156508	39.788169	3235	U	4.59E-05	1.92E-05	2.77E-05	5.93E-06	1.99E-05	1.19E-04
Indiana	Marion Count	350200	0973502	-86.181987	39.818322	453	U	2.92E-05	2.33E-05	3.16E-05	1.42E-05	2.01E-05	1.18E-04
Indiana	Marion Count	352500	0973525	-86.093199	39.784931	3322	U	4.01E-05	1.73E-05	3.42E-05	6.78E-06	2.00E-05	1.18E-04
Indiana	Marion Count	355300	0973553	-86.089542	39.778211	2991	U	4.40E-05	1.77E-05	3.02E-05	6.26E-06	2.02E-05	1.18E-04
Indiana	Marion Count	380200	0973802	-86.154025	39.715954	3423	U	4.16E-05	2.13E-05	2.76E-05	7.90E-06	2.01E-05	1.18E-04
Indiana	Elkhart Count	2700	03927	-85.979148	41.683617	2963	R	1.00E-05	6.75E-05	1.75E-05	2.37E-06	1.99E-05	1.17E-04
Indiana	Lake County	31000	089310	-87.441683	41.644744	1873	U	3.05E-05	3.54E-05	2.10E-05	9.58E-06	2.02E-05	1.17E-04
Indiana	Marion Count	341901	0973419.01	-86.26115	39.770474	5680	U	5.04E-05	1.86E-05	2.14E-05	6.61E-06	2.00E-05	1.17E-04
Indiana	Marion Count	357500	0973575	-86.096789	39.729413	5090	U	4.20E-05	2.55E-05	2.36E-05	5.79E-06	1.99E-05	1.17E-04
Indiana	Marion Count	341000	0973410	-86.245873	39.7849	2069	U	3.86E-05	2.91E-05	2.07E-05	6.33E-06	2.01E-05	1.15E-04
Indiana	Marion Count	352600	0973526	-86.110077	39.787206	5656	U	4.11E-05	1.90E-05	2.85E-05	6.05E-06	1.99E-05	1.15E-04
Indiana	St. Joseph Co	2000	14120	-86.263256	41.673064	1525	U	2.40E-06	7.09E-05	1.69E-05	4.48E-06	2.01E-05	1.15E-04
Indiana	Marion Count	352700	0973527	-86.123459	39.785509	3963	U	4.36E-05	1.64E-05	2.86E-05	5.93E-06	1.99E-05	1.14E-04
Indiana	Marion Count	360700	0973607	-86.056727	39.774143	2192	U	3.79E-05	2.43E-05	2.43E-05	6.19E-06	2.02E-05	1.13E-04

Appendix E

TRI RSEI Model Results – Indiana

**Appendix E - TRI RSEA Model Results for Indiana Based on 1999 TRI Data
Counties with Highest Cumulative (Modeled) Risk - Cancer and Noncancer**

ALLEN COUNTY

<u>HAP</u>	<u>FACILITY</u>	<u>FULL MODEL VALUE</u>
Chromium compounds	SLATER STEELS. FT. WAYNE SPECIALTY ALLOYS D	164,913.21
Manganese compounds	SLATER STEELS. FT. WAYNE SPECIALTY ALLOYS D	29,376.96
Nickel compounds	SLATER STEELS. FT. WAYNE SPECIALTY ALLOYS D	23,445.09
Lead	KUS ZOLLNER DIV.	7,310.68

MARION

<u>HAP</u>	<u>FACILITY</u>	<u>FULL MODEL VALUE</u>
Manganese compounds	INDIANAPOLIS FNDY.	130,502.68
Chromium compounds	INDIANAPOLIS FNDY.	54,398.22
Chromium	STERLING FLUID SYS. (USA) INC. DBA PEERLESS PU	20,688.53
Triethylamine	INDIANAPOLIS FNDY.	17,900.46
Arsenic compounds	QUEMETCO INC.	14,275.82
Chromium	MAJOR TOOL & MACHINE INC.	8,566.07
Sulfuric acid	INDIANAPOLIS POWER & LIGHT	8,313.34
Chromium	PRAXAIR SURFACE TECH. INC.	7,125.30

LAKE

<u>HAP</u>	<u>FACILITY</u>	<u>FULL MODEL VALUE</u>
Lead compounds	USS GARY WORKS	79,413.63
Lead compounds	ISPAT INLAND INC.	43,326.12
Arsenic compounds	USS GARY WORKS	21,013.33
Manganese compounds	USS GARY WORKS	19,664.64
Lead compounds	LTV STEEL CO.	18,734.52
Manganese compounds	ISPAT INLAND INC.	16,162.36
Polycyclic aromatic compounds	USS GARY WORKS	9,723.74

ST. JOSEPH

<u>HAP</u>	<u>FACILITY</u>	<u>FULL MODEL VALUE</u>
Manganese	ROCKWELL AUTOMATION-DODGE	85,547.55
Chlorine	NEW ENERGY CORP.	15,178.22

DELAWARE COUNTY

<u>HAP</u>	<u>FACILITY</u>	<u>FULL MODEL VALUE</u>
Lead	INDIANA STEEL & WIRE ACQUISITIONS CO. LTD.	46,479.64
Nickel	SERMATECH-AEROFORGE CORP.	18,792.20
Lead compounds	GENERAL BATTERY/EXIDE CORP.	6,852.35

CLARK COUNTY

<u>HAP</u>	<u>FACILITY</u>	<u>FULL MODEL VALUE</u>
Manganese	JEFFBOAT L.L.C.	52,592.93

KOSCIUSKO

<u>HAP</u>	<u>FACILITY</u>	<u>FULL MODEL VALUE</u>
Chromium	DALTON CORP.	28,274.28
Manganese	DALTON CORP.	23,895.21
Nickel	DALTON CORP.	10,231.54

LAPORTE

<u>HAP</u>	<u>FACILITY</u>	<u>FULL MODEL VALUE</u>
Chromium	NEW YORK BLOWER CO.	6,251.97

Appendix F

Monitoring Cost Information

APPENDIX F - ESTIMATED COST OF MONITORING FOR THE 58 HAP INCLUDED IN IDEM's PROPOSED AMENDMENTS TO THE STATE EMISSIONS REPORTING RULE

Below are estimated costs of monitoring for the 58 HAP included in IDEM's proposed amendments to the state emissions reporting rule. While some HAP can be monitored using the same methodology (e.g., TO-15), no single instrument or monitoring methodology can measure ambient concentrations of all HAP of concern.

In general the estimated cost for setting up a comprehensive monitoring site (i.e., that can monitor all 58 HAP of concern) would be over \$300,000 with annual operation and maintenance costs estimated at over \$120,000 per site. **Note – Some cost estimates are over three years old, so costs may actually be higher today.**

Identification of compounds included in the HAP's reporting rules according to chemical class suggested EPA reference method for analysis, and instrumentation used for the analysis.

Table 1 provides a summary of the analysis methods for each HAP of concern.

TABLE 1 - SUMMARY OF THE ANALYSIS METHODS FOR EACH HAP OF CONCERN

COMPOUND	CHEMICAL CLASS	EPA METHOD	COMMENTS
Acetaldehyde	Carbonyl	TO-11	Using DNPH cartridges for trapping carbonyl compounds followed by HPLC analysis using EPA method TO-11 & TO-11A
Acrolein	Carbonyl	TO-11	See above
Acetonitrile	VOC	TO-15	Twenty four hour collection of ambient sample in SUMA polished stainless steel canister followed by an GC or GC/MS analysis
Arsenic compounds	Metal	40 CFR ,part 50, Appendix G	Collection of TSP matter on a hi-volume filters followed by an extraction and analysis by AA or ICP
Benzene	VOC	TO14, TO-15	Same as above
Beryllium compounds	Metal	40 CFR ,part 50, Appendix G	Same as above
1,3-Butadiene	VOC	TO-14 or TO-15	Same as above
Cadmium compounds	Metal	40 CFR ,part 50, Appendix G	Same as above
Carbon Tetrachloride	VOC	TO-14, or TO-15	Same as above
Chloroform	VOC	TO-14 or TO-15	Same as above
Chromium Compounds	Metal	40 CFR ,part 50, Appendix G	Same as above
Coke Oven Emissions	VOC, HAP's, Metal	Group of methods	Each species requires a separate method for sample collection and analysis. For most of these compounds reference method is designated by EPA

1,3 Dichloropropene	VOC	TO-14, TO-15	Same as above
Ethylene dibromide	VOC	TO-14, TO-15	Same as above
Ethylene dichloride	VOC	TO-14, TO-15	Same as above
Ethylene Oxide	VOC	TO-15	Same as above
Formaldehyde	Carbonyl	TO-11A	Same as above
Hexachlorobenzene			
Hydrazine			
Lead Compounds	Metal	40 CFR ,part 50, Appendix G	Same as above
Manganese compounds	Metal	40 CFR ,part 50, Appendix G	Same as above
Mercury Compounds	Metal	NIOSH	Method is listed on Mercury Deposition network site
Methylene Chloride	VOC	TO-14, TO-15	Same as above
Nickel Compounds	Metal	40 CFR ,part 50, Appendix G	Same as above
Perchloroethylene	VOC	TO-14, TO-15	Same as above
Polychlorinated Biphenyls; PCB	PCB	TO-10A; PUF method	
Polycyclic organic matter	PAH	TO-13A; PUF method	Samples are collected using polyurethane foam (PUF) followed by an extraction and analysis
1,2 Dichloropropane	VOC	TO-14, TO-15	Same as above
Quinoline	PAH	TO-10A	Same as above
2,3,7,8-Tetrachlorodibenzo-p-dioxin	Polychlorinate d dibenzo-p-dioxins	TO-9A PUF	Same as above
1,1,2,2-Tetrachloroethane	VOC	TO-14,TO-15	Same as above
Trichloroethylene	VOC	TO-14,TO-15	Same as above
Vinyl Chloride	VOC	TO-14,TO-15	Same as above
Chlorine	Corrosive gas	NIOSH	Check the reference book of NIOSH methods
Hydrochloric acid	Acid	NIOSH	Same as above
Hydrofluoric acid	Acid	NIOSH	Same as above
Phosphine			
Methyl Chloroform	VOC	TO-14, TO-15	Same as above
Cobalt	Metal	40 CFR ,part 50, Appendix G	Same as above
Propylene oxide	VOC	TO-15	Same as above
Naphthalene	PAH	TO-13A;PUF	Same as above
Methylene (B) 4-phenylisocyanate			
Glycol Ethers	Poly – substituted alcohols	NIOSH	Same as above
Toluene	VOC	TO-14, TO-15	Same as above
Toluene Diisocyanate			
Carbonyl Sulfide	VOC	TO-15	Same as above
Triethylamine	VOC	TO-15	Same as before
Diethanolamine	VOC	TO-15	Same as before
Xylene (O,M,P)	VOC	TO-14, TO-15	Same as before

Hexane	VOC	TO-14, TO-15	Same as before
Methyl ethyl ketone	VOC	TO-15	Same as before
Methanol	VOC	GC Method	
Phenol	VOC	TO-15	Same as before
Styrene	VOC	TO-14, TO-15	Same as before
Vinylidene Chloride	VOC	TO-14, TO-15	Same as before
Chloromethane	VOC	TO-14, TO-15	Same as before

COST ANALYSIS

The cost analysis is estimated based on individual method. The cost is directly related to complexity, labor, instrumentation used for the analysis, QA/QC and reporting requirements of the project. The cost is estimated using the best judgment; the actual cost may be higher.

EPA Method TO-11:

EPA method TO-11 is used for analyzing carbonyl compounds in the air. The monitoring for this compounds requires automatic sampler which collects samples at pre-set times using DNPH cartridges.

After the sampling, the cartridges are extracted with acetonitrile and analyzed on HPLC for various carbonyl compounds. Each sampling cartridges cost about \$20 and analysis cost is about \$110 per sample. Samples are analyzed for formaldehyde, acetaldehyde, acetone, benzaldehyde, crotonaldehyde ETC. The cost of the multi channel sampler is about \$ 12,000.

EPA Method-TO-14:

EPA method TO-14 is used for the VOC analysis. Ambient air sample is collected in a SUMMA polished stainless steel canister for the analysis. The cost of the automatic sampler plus shelter and a canister is about \$12,000 per site. The analysis cost ranges form \$250 to \$300 per canister sample if the laboratory is using a GC/multi-detector system or \$500 to \$600 per sample if the laboratory is using GC/MS (quote from the Eastern Research Group (ERG) contract laboratory).

EPA Method TO-15:

EPA method TO-15 is also used for VOC analysis. The list of compounds has been increased from method TO-14 due to the addition of polar organic compounds. In order to analyze the polar compounds, the method requires the use of GC/MS technology in addition to a special auto-sampling device, which will remove excess moisture from the samples WITHOUT affecting the recovery of the polar organic compounds. The per-sample analysis cost is at least \$600 per canister, and may be higher if analysis of very polar organics, which are unstable in standard mixtures, is desired. The sampler used for method TO-14 can also be used for TO-15 (\$12,000 per sampler)

Metals Sampling and Analysis (40CFR Part 50 Appendix G)

The Code of Federal Regulations method for metals analysis uses glass-fiber filters sampled using a total-suspended-particle (TSP) sampler. These samplers cost approximately \$5,000 to \$6000. The cost of the sample analysis is \$15 per metal analyzed per sample (9 metals analyzed from one sample would cost \$135).

PAH and PCB Analysis (Various methods including TO-9, TO-10, and TO-13; PUF Sampling)

The various PAH analysis methods incorporate a sampler which passes air through treated polyurethane foam (PUF). PAH sampling apparatus cost \$3,000 to \$5,000 per sampler. The cost of the PUF/XAD cartridge is about \$65 per unit. The analysis of PAH samples is very time-consuming and labor intensive. Sample analysis cost for PAH analysis range from \$1000 to \$2,000 per sample depending on number of congeners monitored.

Acid Mist/Acid Gas Analysis (NIOSH Methods for HCl, HF, Cl2 etc.)

Various NIOSH methods exist for the analysis of acid mists and acid gasses. We do not currently have information regarding the sampling and analysis costs for these methods.

SUMMARY

This summary reflects the cost of monitoring all 58 HAP included in IDEM's proposed amendments to the state emission reporting rule. in the HAP's reporting rule. Each table reflects the cost of monitoring each chemical class for one site at a frequency of one sample every six days. The cost is estimated using any available information and best judgement. Many of these HAP can be monitored using multiple methods and cost would vary accordingly.

Carbonyl Monitoring:

	Unit Cost	Quantity	Total
Sampler	\$12000	1	\$12000
Cartridges	\$20	60	\$1200
Analysis	\$110	60	\$6600
Sub-Total			\$19,800

VOC Monitoring:

	Unit Cost	Quantity	Total
Sampler	\$12000	1	\$12000
Canister Cost	\$500	12	\$6000
Analysis	\$500	60	\$30000
Sub-Total			\$48,000

Metals Monitoring:

	Unit Cost	Quantity	Total
Sampler	\$2500	1	\$2500
TSP Filters			
Analysis (8 metals)	\$250	60	\$15000
Mercury Monitoring	\$200	60	\$12000
Sub-Total			\$29,500

PAH and PCB Monitoring:

	Unit Cost	Quantity	Total
Sampler	\$2000	1	\$2000
Cartridges	\$65	60	\$3900
PAH Analysis	\$350	60	\$21000
PCB Analysis	\$1000	60	\$60000
Sub-Total			\$86,900

Total first year cost per site:

Carbonyl Monitoring:	19,800
VOC Monitoring:	48,000
Metals Monitoring:	29,500
PAH and PCB Monitoring:	<u>86,900</u>
	\$306,200

Total Operation and Maintenance Costs (Using EPA estimates dated 2/1/01): \$122,000

Response to Comments Received Concerning the Senate Enrolled Act (SEA) 259 Report

December 31, 2002

Comments received by:

Audubon Society (AS)
AccraPac (APAC)
Bethlehem Steel (BETH)
Delphi Automotive (DA)
Eli Lilly and Company (LLY)
Improving Kids' Environment (IKE)
Indiana Chamber of Commerce Coalition (ICC)
Indiana Electric Utility
Air Work Group (IEUAWG)
Monaco Coach (MC)
National Starch (NAS)
National Steel (NS)
NiSource (NI)
Purdue University (PU)
US EPA, Region 5 (EPA)
U tilimaster (UTIL)

General

Comments were received in several areas:

- wording suggestions, generally to provide clarity or more detail;
- substantive recommendations on the draft SEA 259 report, generally identifying issues with the analyses, how the results were presented or identifying omissions; and
- recommendations on the HAP reporting rule.

Some comments can be addressed in the context of the report and others are beyond the scope of the report. Wording suggestions were addressed, where appropriate. Specific recommendations made concerning strengths and weaknesses of the various data sources were addressed. Recommendations on HAP reporting will be considered during future discussion on possible amendments to the state emission reporting rule. This document focuses on responding to comments concerning the draft SEA 259 report.

Priorities

Comment

Several commentors stated that implementing the federal air toxics program should continue to be a priority.

Response

The departments agree.

Comment

Several commentors stated that IDEM and ISDH should continue to work with stakeholders to identify and address air toxics issues.

Response

The departments agree.

Comment

The Areas of Focus under Priorities do not address basing prioritization decisions on existing, known risks. IDEM and ISDH need to demonstrate risk based on thorough assessment of existing data and then collect additional data as needed. The report and IDEM's priorities should recognize US EPA's Utility Report and the subsequent regulatory Finding on Utility HAP. In fact, data in the draft report show that utilities are not a source sector of concern (see pages 33 and 35). Therefore utilities should not be included under areas of Focus.

Response

The departments believe further assessment of HAP emissions from electric utilities is warranted based on assessment of the available data. Electric utilities emit significant amounts of several of the HAP of concern identified in the report. The departments recognize the findings of US EPA's Utility Report and the subsequent regulatory Finding on Utility HAP. However, both documents have also received significant comment by the scientific and regulatory communities. This is a complicated issue and one that cannot be resolved in the context of this report.

Comment

Data in the draft report do not support including coke ovens and steel mills as an Area of Focus under the Priorities Section.

Response

The departments believe further assessment of HAP emissions from coke ovens and steel mills is warranted based on assessment of the available data. Coke ovens and steel mills emit significant amounts of several of the HAP of concern identified in the report.

Comment

IDE� should include pollution prevention as an element of this strategy. A workgroup should be established to identify state pollution prevention priorities.

Response

IDE� and ISDH agree that pollution prevention should be an important element in addressing air toxics issues in Indiana. In addition to providing technical support to Indiana businesses, the departments also work to provide programs such as the Governor's Awards for Excellence which has been successful in encouraging pollution prevention by recognizing businesses who act proactively, make decisions and engage in activities to reduce their environmental impacts. The departments also make available pollution prevention grants and work with businesses to identify opportunities to reduce toxic emissions when possible, in the context of IDE�' s permitting and other regulatory programs.

Comment

IDE� is encouraged to pursue HAP emission reductions from diesel exhaust and 'backyard burning' in addition to focusing on reductions from industry. Diesel initiatives should focus on individual vehicles not idling programs.

Response

IDE� and ISDH agree that HAP reductions should be pursued from all contributing sources in the most practical, cost-effective manner. With respect to diesel emissions, one priority identified in the report is to gain a better understanding of the risks they present in Indiana and options for reducing emissions. Indiana will also follow emerging national initiatives concerning both dioxin and diesel emissions. IDE� currently focuses considerable resources to reduce open burning through both compliance activities and education and outreach. The departments agree that this should remain an area of focus.

Comment

One priority should be to assess vinylidene chloride in Posey County.

Response

The departments agree with the concern for the vinylidene chloride levels measured in Posey County in February 2000. A preliminary assessment did not reveal any particular source. However, a more detailed assessment is necessary. Furthermore, the departments are looking at ways to investigate spikes in measured pollutants at HAP monitoring sites. Unfortunately, the monitoring methodology results in unavoidable delays in access to the data. This suggestion has been addressed in the priority section of the report.

HAP Emission Data

Comment

A general authority should be established allowing IDEM to collect specific HAP emission information when it is established that there may be a health risk.

Response

IDEF and ISDH agree that HAP emission information should be collected only when necessary to assess or address suspected or identified state- or community-specific HAP risk issues. The draft report identifies that the agencies prefer to collect HAP emission information in a focused manner to address specific risk issues. Further discussion with stakeholders is necessary to determine the specifics of a reporting mechanism.

Comment

The draft report implies that because there is a 60% difference between statewide TRI emission estimates and statewide RAPIDS emission estimates, that the perceived 'gaps' in TRI data make it of such low quality it should not be used to make judgments about possible public health issues or the lack of public health issues. We believe that the RAPIDS data greatly overstates statewide HAP emissions. It is not clear in the draft report how the RAPIDS data is calculated and compiled – other than estimates are made by IDEM, a party which does not have direct involvement in the operation of the sources of the emissions.

Comment

Page 14, under Findings, it states 'The reasons for this difference include estimate techniques, and incomplete and inaccurate reporting.' What is the basis for this statement? Has IDEM found evidence of reporting issues in the TRI report that demonstrate underestimating HAP emissions? Has the RAPIDS model been subject to peer [re]view and if so, what was the result of the [re]view?

Response

It is important to recognize that the differences in emission estimates in TRI and RAPIDS apply to stationary point sources only. The differences between the estimates result from several factors, including IDEM estimating HAP emissions not reported by the sources, differences in the values reported by the sources themselves and a lack of documentation on how sources estimated emissions reported to TRI. In the absence of complete source reported information, the agencies are required to fill in the gaps using peer reviewed methodologies. IDEM has worked with US EPA and the other Great Lakes states to develop a protocol for compiling and estimating HAP emissions throughout the region. Participants in this process are emissions and inventory experts from US EPA and across the region. The developed protocol includes significant peer review of the assembled inventories and methodologies used.

An example of where the state adjusts emissions data would be instances where the total volatile organic compound (VOC) or particulate matter (PM) emission estimates for sources reporting under the state emission reporting rule differ greatly from HAP estimates reported to TRI. In these cases, IDEM applies a process-specific speciation profile, developed by US EPA, to identify HAP that may be emitted. In some instances, emissions may be overestimated for a source while in another instance a source may not be reporting all HAP emitted because either they don't have knowledge of the emissions or are not required to report those HAP. The agencies agree that the sources are in the best position to provide emissions estimates, which is one reason we proposed HAP reporting requirements in the amended state emissions reporting rule.

IDEF and ISDH have not stated that TRI data are not useful for assessing public health issues but rather that they only provide part of the picture. In fact, TRI data were used in this report as a mechanism to identify HAP risk concerns.

Comment

The report should include an evaluation of HAP information contained in Title V and FESOP permit applications.

Response

The departments agree that permit applications provide valuable information on a source's potential to emit. At this time, IDEM's permit application database does not track specific levels of HAP potential to emit, but rather sources are segregated by permit program. Major sources of HAP are in the Title V permit program and nonmajor sources that have accepted a federally enforceable limit on their HAP potential to

emit are in the FESOP program. The other consideration is that a source's potential to emit can be significantly greater than its actual emissions. That is why it is important to have both potential to emit and actual emissions. IDEM is looking at ways to compile and evaluate HAP information contained in permit applications.

Comment

How does IDEM explain the two-fold increase in HAP emission between TRI data and RAPIDS on electrical utilities?

Response

The majority of the difference is due to hydrochloric acid emission estimates. IDEM used emission factors published in US EPA's Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources and applied a conservative control device efficiency. Because IDEM does not have authority to require sources to provide documentation to support their estimates to TRI, we do not know the methodology individual sources used to develop those estimates.

Comment

Electric utilities should be excluded from requirements to provide additional HAP information to IDEM based on the determination that electric utility emissions have already been examined and it has been demonstrated that they pose no risk. Mercury has been determined by EPA to be the only pollutant worthy of consideration for regulation.

Response

The agencies recognize the findings of US EPA's Utility Report and the subsequent regulatory Finding on Utility HAP. However, it is premature to exclude a specific source sector from any future reporting requirements until there are further discussions with stakeholders to determine the specifics of those requirements.

Monitoring Data

Comment

Three commentors support using monitoring to identify issues or to confirm issues identified by emissions data and modeling.

Response

The agencies agree that monitoring data can be used to identify issues or to confirm issues identified by emissions data and modeling. However, the ability to accurately assess air toxics in the ambient air is limited by several factors, including resources, the inability to locate monitors in all possible areas of concern, and analytical limitations and uncertainties. Therefore, monitoring serves as one of several tools, along with modeling and emissions data, that are used to identify or confirm possible HAP risks.

Comment

The report needs to be more specific about addressing gaps in air toxics monitoring data, including the need to develop monitoring capabilities within IDEM, more particulate monitoring and the capability to do fence line monitoring (screening).

Response

The departments agree that much of the detail for addressing gaps in air toxics monitoring data still needs to be developed. Because monitoring is expensive, resources are limited, and the identification of monitoring needs and options is still evolving, the details on how to address those gaps in air toxics monitoring data will likewise need to be developed over time following further discussion with stakeholders.

Comment

IDEV should seek funding for a flexible and mobile HAP monitoring system that could easily be deployed where needed (e.g., EPA's toxic atmospheric gas analyzer mobile truck). The costs in the report for monitoring may be overstated based on the presumption that permanent monitoring sites need to be established.

Response

The agencies agree that temporary and mobile HAP monitoring may serve as a useful screening tool for identifying areas or issues warranting further assessment or action. EPA's toxic atmospheric gas analyzer mobile truck is generally used to assess air quality following a chemical spill or industrial release. However, it does not provide data necessary to assess air quality issues temporally (over time) or spatially. The agencies do agree that a variety of monitoring methodologies should be considered as part of any additional monitoring efforts.

Comment

Based on the USGS study, additional mercury studies do not appear necessary.

Response

Only one year's worth of data is available and the study includes other elements that are just now being implemented (e.g., dry deposition), therefore, it would be premature to conclude that additional mercury assessment is not necessary until the study is completed.

Health Data

Comment

Two commentors indicated that cancer rate assessment in the report may be misleading because cancer rates in certain areas could be significantly greater than represented by a statewide or national average. These commentors raised concerns about ignoring the state data and use of national estimates, and raised the question of whether there are any statistically significant hot spots in Indiana.

Response

Cancer cases do not occur uniformly across small geographic divisions (e.g., census tracts). It is expected from the random distribution of cases that some census tracts will have an excess of cases. In a practical sense, it is almost impossible to distinguish whether excess cases are due to chance or to a particular cause. The departments will continue to look for 'hot spots' and attempt to determine if an association with an environmental pollutant exists. While investigating 'hot spots' can be of value, this should not be the sole basis for developing environmental policy.

Comment

One way to improve the data is to publish information so that the public can use it.

Response

The departments agree with this suggestion. However, the legislation authorizing the cancer registry is very specific about preventing the identification of individual cases. This limits the amount of information that can be provided to the public for small geographic areas.

Comment

Where health data indicate a problem, it must be investigated for possible causes.

Response

The departments agree with this suggestion.

Content/Wording Suggestions

Comment

Two commentors expressed concern about including new source review as an element of pollution prevention.

Response

The departments did not intend for this section of the report to indicate that new source review be used as a means to overtly promote or require pollution prevention. The intent was to reflect the belief that it is generally more practical and cost effective to minimize emissions during the construction or modification of a source rather than trying to address emissions later should they present risk. New source review will be listed under the priority entitled Continue to assess suspected state- or community HAP risk issues.

Comment

The document should explain the concept of risk levels consistent with US EPA's approach to describing risks. The draft report leaves the impression that any risk greater than one-in-a-million is unacceptable.

Response

The departments agree and have addressed this commenting using language provided by the commentor.

Comment

The document oscillates between presenting emissions data in mass emissions and then in the text noting that the compounds with the highest mass emissions may not be the ones with the most deleterious health effects.

Response

The data were presented in mass emissions because that is how they are made available from existing data sources (e.g., TRI and RAPIDS). Typically, this is how the public see the data. The pollutants were then weighted by toxicity and emissions to try to provide some context on which might present the greatest risk concerns.

Comment

The report takes the position that modeling air pollution is better than actually monitoring air pollution. This position is contrary to the accepted Clean Air Act methods to show compliance with the NAAQS [National Ambient Air Quality Standards].

Response

The report recognizes that monitoring, modeling and emissions data are all very important tools to understand risk to public health from HAP. Modeling helps fill in information gaps where monitoring is limited due to resources, the inability to spatially or temporally locate monitors in all possible areas of concern, or analytical limitations and uncertainties. Modeling serves as one of several tools, along with monitoring and emissions data, that are used to identify or confirm possible HAP concerns.

Comment

The report needs to provide more clarity on how the overall strategy will be implemented and the resources that will be required. The prioritization of chemicals, counties and sources of concern should be based on population and risk.

Response

The departments believe that the report identifies HAP concerns by assessing available data and attempts to prioritize those concerns in a broad fashion. IDEM began reviewing data several years ago to identify possible HAP concerns and to prioritize our efforts in this area, attempting to maximum benefit with given resources. One priority identified by this earlier work was the need to improve the quality of HAP emissions inventories, prompting proposed amendments to the state air emissions reporting rule to include HAP reporting.

The departments believe that the next steps in this process will be to work with interested stakeholders to further assess available data, reach consensus on how to fill data gaps, and how to find the resources necessary to identify, confirm and address HAP issues.

Emission Reporting Rule

Note – Recommendations on HAP reporting will be considered during future discussion on possible amendments to the state emission reporting rule. The comments are summarized below for informational purposes.

Comment

Industry has supplied IDEM data on the cost of reporting HAPs, yet this information was excluded from the report. Part of SEA 259 required the agencies to state the resources necessary to collect the data required by the HAPs rule. This needs to be included with the report and also the agencies' resources for this rule.

Comment

The HAP reporting rule appears too aggressive and burdensome on point sources. Rule should include a list of targeted HAP that are most significant from point sources and should have a reasonable reporting thresholds (1 ton per HAP). Should implement for 3 to 5 year cycle to evaluate benefits and identify 'next steps.'

Comment

Building size should be factored into the reporting requirements when determining whether process level emissions should be reported. Also, the reporting threshold should be raised to 500 pounds or the TRI threshold, whichever is greater. Also, pollution prevention opportunities should be allowed for in the emission reporting rule. The two biggest issues with the rule are reporting to the process level and the reporting thresholds.

Comment

IDE M should commit to structure amendments to the emission reporting rule so that they are limited by source or source sectors.